# CONSTRUCTION NEWS

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## CONSTRUCTION NEWS.

### PLANS AND SPECIFICATIONS ON FILE.

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## RAILWAYS.

BAKERSFIELD & VENTURA.—T. B. Blackburn, Supt. and Ch. Engr., Oxnard, Cal., informs us that contracts probably will not be let for building this railway from Los Angeles to San Francisco, via Oxnard, Sespe and Bakersfield, about 420 miles, until after election. Surveys have been made and right-of-way secured. This railway is owned by the Smith Estate of Los Angeles. Noted on Aug. 29.

BALTIMORE & OHIO.—A press dispatch from Washington states that contracting firms have had engineers going over the route of the Washington & Western Maryland R. R. Co. This is a line acquired by the Baltimore & Ohio some years ago, and was designed to provide a freight yard in Georgetown, D. C. The project of building it has been in abeyance for some years. It is now believed that the company has its construction in view and that the contractors are looking over the field with the view of bidding on the work.

BUFFALO, ROCHESTER & EASTERN.—We are officially advised that company has taken no steps yet in connection with construction, but is now running preliminary surveys for its line which is to connect Buffalo, Rochester and Troy, N. Y. R. D. Gillett, Westfield, Mass., is Pres. Gilbert Hodges is Ch. Engr., 218 Cutler Bldg., Rochester, N. Y. Previously noted.

CAIRO & TENNESSEE RIVER.—E. C. Weston, Mgr., Wickliffe, Ky., is quoted as saying that work will be started shortly on a section of this proposed line from Wickliffe, Ky., east to Hopkinsville, about 108 miles. As noted on June 20th, "a line will be built by this company from Wickliffe, Ky., three miles east of Cairo, Ill., east through or near Mayfield, Dexter, Canton, Cadiz, Gracey, Hopkinsville, Elkton, Franklin, Scottsville, Tompkinsville, Albany, Monticello and Jellico, Ky., to Newcomb, Tenn., unless built through Bell County, and Middlesboro, Ky.; the road will pass through or near county seats in Tennessee as follows: Jacksboro, Tazeville, Sneedsville, Rogersville and Blountville to Bristol, approximately 465 miles. Arrangements are nearly completed for building the three sections from Wickliffe east to Hopkinsville, Ky., 108 miles, and these three sections probably will be finished and put in operation within one year. A large amount of terminal property has been bought and most of the right-of-way secured and surveys made for 425 miles. Contracts have been let for the three sections to the ATLANTIC & CAIRO CONSTRUCTION CO. The work is ordinary level construction for most of the way to Hopkinsville, with little rock work. There are to be two bridges, one about 1,600 ft. or 1,800 ft. long over the Tennessee River, the other about 1,000 ft. long over the Cumberland River. Maximum grades one-half of one per cent., maximum curves three degrees. L. W. Goode is Pres., 111 Broadway, New York; Charles H. Delano, Gen. Mgr., at Mayfield, Ky."

CHICAGO, INDIANAPOLIS & EVANSVILLE.—Announcement is made that the CARTER CONSTRUCTION CO., of Indianapolis, Ind., will soon begin construction of this railroad. The ILLINOIS STEEL CO., of Chicago, has contract for 10,000 tons of steel rails. Plans for the construction of the C., I. & E. railroad have been changed, and the proposed line, instead of running through Petersburg, Ind., thence to Indianapolis, will pass west of there eight miles through valuable coal deposits, thence to Vincennes and Terre Haute, to Chicago. The new survey places the proposed railroad between the E. & T. H. and E. & I. to Terre Haute. Under the new survey White River will be crossed near Oliphant, Ill. Board of directors has been elected as follows: John B. Carter, Pres.; Charles A. Denneen, Richard Zenkere, Ovid B. Jameson, of Indianapolis, and William Kenefick, of Kansas City, Mo. A branch will be built from Oakland to Vincennes, 27 miles. W. H. Townsend is Traffic Agt. and W. T. Hicks is Vice-Pres.

CLEVELAND, CINCINNATI, CHICAGO & ST. LOUIS.—A branch will be built from Evansville to Mt. Carmel, Ind. W. M. Duane is Ch. Engr., Cincinnati, Ohio.

DENVER & GULF.—As proposed, this railway will extend from Denver, Colo., to the Red River, 600 miles. Surveys have been made from La Junta, Colo., to Texhoma, Okla., 160 miles, and are in progress from Texhoma southeast, 140 miles. Contracts for the surveyed portion will be let at an early date. The officers are: R. E. Davis, Pres.; W. R. Evans, First Vice-Pres.; W. M. Davis, Second Vice-Pres., and James Hicks, Ch. Engr., all of Texhoma, Okla. Noted on Sept. 19.

FAIRMONT & SOUTHERN.—Right-of-way has been obtained and grading for 70 miles done. As noted on Sept. 19th, this company has been incorporated in Pennsylvania, with $25,000 capital, to build a line from Belington, W. Va., on the Baltimore & Ohio R. R., the Coal & Coke Ry., and the Western Maryland R. R., north to Pittsburg, Pa., 125 miles. Ralph Overholt, of Pittsburg, and B. F. Overholt, of Scottdale, Pa., are the principal promoters. The officers are: Pres., Charles E. Conway, of Fairmont; Vice-Pres., Charles F. Teter, of Philippi, W. Va.; Secy., W. H. Conway, of Fairmont; Treas., Samuel A. Moore, of Philippi. The railway will begin near Belington, in Barbour County, and extend along the most practicable survey through the Tygart Valley to the Monongahela River, taking in the cities of Fairmont and Granton, W. Va. From Fairmont the line is to be built into Pittsburg. It is reported that the plans of the company have matured to such a point that operations will be commenced upon construction at an early date.

GRAND TRUNK PACIFIC.—Charles M. Hays, Pres., Montreal, Que., recently stated that this company intended ultimately to build from Fort George to Vancouver, B. C., but that this line, like most of the branches, would be deferred until the main line was completed.

KELLY'S CREEK, TWENTY-MILE & CAMDEN.—Incorporated in West Virginia to build a railroad from the mouth of Kelly's Creek on the Kanawha River by way of Twenty-Mile Creek to Camden. Capital stock, $100,000. Incorporators: George E. Bruce, C. C. Lewis, Sr., E. W. Knight, O. P. Fitzgerald, Jr., J. F. Brown, all of Charleston, W. Va.

MOUNT VERNON & EASTERN.—With a capital of $1,000,000 this company has been organized to construct a standard-gage steam or electric railroad from Mount Vernon, N. Y., to Lewisboro, 35 miles long, in Westchester County. The directors are: Oakleigh Thorne, 135 Broadway; William H. Chesebrough, 111 Broadway; Carlton Bunce, 135 Broadway; Howard K. Wood, 43 Wall St.; Charles E. Mitchell, all of New York; Marsden J. Perry, of Providence, R. I.; George H. Hansel, of Cranford, N. J.; Kennett K. McLaren, of Jersey City, N. J.; and Allen Wardwell, of Lawrence, N. Y.

NEW YORK CENTRAL.—W. C. Brown, Senior Vice-Pres., at a recent business men's conference in Boston, stated that several months ago the directors of the New York Central, upon his recommendation, voted $1,275,000 for third tracking and grading on the Boston & Albany lines; $1,389,600 for locomotives for the Boston & Albany service, and $364,000 for passenger cars, a little more than $3,000,000 to be expended in 1907.

NORTHERN PACIFIC.—A branch line will be built from Tenino, Wash., to Tacoma, 41 miles. W. L. Darling is Ch. Engr., St. Paul, Minn.

PACIFIC & IDAHO NORTHERN.—E. M. Heigho, Vice-Pres. and Gen. Mgr., Weiser, Idaho, advises us that this line is now in operation from Weiser to Evergreen, 76 miles, and that an extension will be built from Evergreen to Meadows, 15 miles, and from Meadows to Roseberry, 35 miles. Final survey has been made and right-of-way partly obtained for the Evergreen-Meadows line. Preliminary survey only has been made for the Meadows-Roseberry extension. R. E. Merrick is Ch. Engr., Weiser.

PULLMAN, LACROSSE & COLUMBIA RIVER.—Incorporated in Washington to build a railroad from Pullman, Wash., via Lacrosse to a point on the Columbia River to be determined by survey. The capital stock is $1,500,000 and the incorporators are J. O. Staats, H. N. Greene, J. H. Clarke, T. H. Shebe, E. S. Knowlton, P. N. McKenzie, J. S. Schrock, all of Lacrosse, and J. B. Taggart of Hay, Wash.

PITTSBURG & LAKE ERIE.—An extension may be built from Youngstown to Lorain, Ohio. J. A. Atwood, Ch. Engr., Pittsburg, Pa.

SOUTHERN PACIFIC.—Larger terminals may be built at El Paso, Tex. W. G. Van Vleck is Vice-Pres. and Mgr. of the Galveston, Harrisburg & San Antonio Ry., at Houston, Tex.

According to the San Francisco "Chronicle," the S. P. R. is planning to build from Benicia to Vallejo, Cal., about seven miles.

ST. LOUIS, BARTLESVILLE & PACIFIC.—Company will receive bids at once for the construction of its proposed line from Webb City, Mo., to Pondcreek, Okla. It is planned to commence grading about Nov. 1st. F. M. Overlees, at Bartlesville, Ind. T., is Pres.; D. H. Rhodes is Ch. Engr., 213 West Fourth St., Joplin, Mo.; H. J. Holm, Secy.; Conrad Strecker, Treas. This line will be about 230 miles long and will connect Joplin, Mo., with Miami and Bartlesville, Ind. T., and Pondcreek, Okla. Previously noted.

STATESVILLE AIR LINE.—We are officially informed that surveys are now in progress for the section between Statesville, N. C., and Mount Airy, 60 miles. Contracts will be let when surveys are completed. D. W. Turner is Pres. and L. W. Greenlee is Ch. Engr., Statesville. Previously noted.

TOPEKA & SOUTHWESTERN.—Contract for grading first 17 miles of railroad has been awarded to J. H. MAXWELL, of Topeka, Kan., and W. T. DENTON, of Cleburne, Tex. W. E. King, formerly Asst. City Engr. of Topeka, has been appointed Resident Engr. for the first division of the road. His jurisdiction will be over the Topeka yards and terminals of the line and over eleven miles of the road. As previously noted, C. K. Holliday, E. B. Merriam and J. B. Sims, of Topeka, Kan., have been appointed a committee to secure funds for the construction of this railway. Regarding this project, W. L. Taylor, Pres., Topeka, Kan., wrote us last spring that contract has been let to the SOUTHWESTERN RY. CONSTRUCTION CO., of Topeka, for building and equipping this railway from Topeka to Council Grove, 60 miles. "Our engineering department is now preparing the specifications for the bridges, buildings, etc., and the same will be ready to sublet. It is our intention to push the work on this line to completion and have it in operation by the first of next year. Our line will be laid with 80-lb. steel; rock ballast; a maximum grade of 1 per cent. compensated, and a maximum of 4 degrees curvature. We expect to make arrangements for the Missouri Pacific to operate their coast to coast trains from Coun-

cil Grove to Kansas City over our line, via Topeka. This will save them nearly 40 miles and put Topeka on their through line."

VALLEY RIVER.—We are officially advised by L. E. Shull, Secy. and Gen. Mgr., Mill Creek, W. Va., that this company will build a railroad from Mill Creek to Clover Lick, W. Va., 43 miles. Surveys are partly made. Right-of-way and capital are partly obtained. W. A. Dromgold is Pres., York, Pa.; John Alden is Ch. Engr., Elkins, W. Va.; J. G. Hoffman, Jr., Vice-Pres. Headquarters, Mill Creek, W. Va.

WHEELING & LAKE ERIE.—It is reported that this company will double track its line from Wheeling, W. Va., to Toledo, Ohio. H. T. Douglas, Jr., is Ch. Engr., Pittsburg, Pa.

## ELECTRIC RAILWAYS.

WORCESTER, MASS.—If right-of-way is furnished by residents along the proposed route a new line will be built from Oxford Heights to Rochdale by the Worcester & Southbridge St. Ry. Co. Samuel Anderson, Webster, Mass., is Gen. Mgr.

WATERBURY, CONN.—Edwin S. Todd, Treas. of the Waterbury & Milldale Tramway Co., Milldale, Conn., advises us that Sanderson & Porter, 52 William St., New York City, are Engrs. for this proposed 8-mile electric railway. Noted on Oct. 3.

PATCHOGUE, N. Y.—We are officially advised that ROSSITER, MacGOVERN & CO., 90 West St., New York, have contracted to construct the lines of the Suffolk Traction Co. On Sept. 3 the company started construction, but it was held up by injunctions until Oct. 4, when actual construction was begun. All right-of-way has been obtained and surveys made. There will be a line connecting Brookhaven with Babylon, 23 miles, passing through Patchogue. From Patchogue there will be a line to Port Jefferson, 17 miles. The towns of Bellport, Sayville, Oakdale and Islip will be served by the traction company. It is probable that a power house will be built at Patchogue and two substations at other points. Thomas L. Hughes, 5 Nassau St., New York, is Pres.; J. C. Brackenridge, Pres. of Rossiter, MacGovern & Co., 90 West St., is Ch. Engr.; A. R. Applegarth, Patchogue, is Res. Engr.

The Appellate Division of the Supreme Court of New York has decided that the South Shore Traction Co. has forfeited its franchise in Suffolk County, according to press reports because of its failure to construct the road within the time limit. The road is now under construction. It was proposed to operate through Patchogue, Islip, Bay Shore, Babylon, Jamaica and Long Island City.

LE RAYSVILLE, PA.—Citizens have organized a company to build an electric railway from Le Raysville, Pa., to Nichols, N. Y., via Warren Center, West Warren and Windham, Pa. At a recent meeting the following officers were elected: Pres., Dr. J. C. Tripp, Warren Center; Vice-Pres., Hon. N. W. Pendleton, South Warren; Secy., M. A. Sleeper, Warren Center; Treas., F. D. Robbins, Le Raysville.

BUTLER, PA.—The Butler & Chicora St. Ry. Co. has been organized to build a line connecting Kaylor, East Brady, and Butler, Pa. An application for a charter will soon be made by E. W. Dewey, John Daly, W. G. Sterns, W. J. Horan and W. Crisweld.

GREENCASTLE, PA.—Ordinances have been passed by the Councils of Chambersburg and Greencastle, granting franchises to the Chambersburg, Greencastle & Waynesboro St. Ry. Co. for the proposed extension from Greencastle to Chambersburg and over certain streets in Chambersburg. Noted on Oct. 3.

NEWTOWN, PA.—The directors of the Newtown, Langhorne & Bristol St. Ry. Co. have elected the following officers: Pres., Frank Battles; Vice-Pres., W. Frederick Snyder; Treas., H. H. Harrison; Secy. and Asst. Treas., John L. Richter; Gen. Mgr., W. H. Janney. Board of Directors, Frank Battles, W. Frederick Snyder, H. H. Harrison, William Henry Snyder, A. D. Chapin, Jr., and Alexander Chambers. The company operates 30 miles of line.

SUNBURY, PA.—The Sunbury & Selinsgrove Elec. Ry. Co. has awarded the contract for the construction and equipment of this proposed electric line from Sunbury to Selinsgrove, to the YORK CONSTRUCTION CO., of York, Pa. The cost is estimated at $250,000. If the present proposed route is followed the line will cross the new bridge over the Susquehanna River, which has just been opened to traffic. W. H. Lyons is Pres., Sunbury, Pa. L. G. Brown, P. M. Harrison and G. W. Drury, of York, and Boyd Musser, of Scranton, Pa., are interested.

WELLSBURG, W. VA.—The Bethany Trolley Syndicate, of Wellsburg, has been chartered with $10,000 capital to build a line from Wellsburg to Bethany, W. Va., about seven miles. The incorporators are J. L. B. Queen, R. M. Addleman, H. O. Moon, B. S. Honecker and C. J. Schuck, all of Wheeling, W. Va.

BLUEFIELD, W. VA.—A street railway franchise has been granted to E. T. Oliver and E. L. Bailey, it is reported, by the City Council.

WAYCROSS, GA.—The Waycross Elec. Ry. Co. may begin construction about Nov. 1. The line, it is said, will have altogether 50 miles of track, including line in Waycross and extensions to Blackshear and Waresboro. Capital, $300,000. Those interested are George W. Deen, Waycross; Burdett Loomis, Hartford, Conn.; Harley Pettibone, New York; W. M. Toomer, Jacksonville, Fla.; Dan Lott, J. M. Bell, J. S. Bailey, C. M. Sweat, John T. Myers, W. W. Lambdin, J. E. T. Bowden, W. H. Buchanan and C. G. Parker, of Waycross.

ORLANDO, FLA.—Dr. Geo. T. Bennett, of Orlando, advises us that he is interested in the promotion of an electric light, power and traction company, which will build from Sanford to Kissimmee, via Orlando, 40 miles, through the orange belt. Subscriptions are now being taken.

HUMBOLDT, TENN.—I. H. Dungan is interested in project to build an electric railway from Humboldt to Dyersburg.

WOOSTER, OHIO.—It is announced that all of right-of-way has been secured by the Wooster & Mansfield Elec. Ry. Co., which is to build a line to connect Wooster with Mansfield. David Collier, of Plimpton, Ohio, is Vice-Pres.

DECATUR, IND.—The directors of the Fort Wayne & Springfield Ry. Co. have decided to ask for bids for the construction of twelve miles of road, including three bridges, from Decatur to Berne, it is reported. W. H. Fledderjohann is Pres. and Gen. Mgr., Decatur.

LA FAYETTE, IND.—The Commissioners of Tippecanoe County have granted a 50-year franchise to the Chicago & Western Indiana Traction Co., to build and operate an interurban road through the southwestern part of the county. It provides that the company must build its own bridges and prohibits the operation of the railroad by steam.

AURORA, ILL.—The Western Illinois Traction Co. has been incorporated, with the principal office in Chicago, and the capital stock nominally $100,000. It is proposed to construct the road from the township of Lyons, in Cook County, through the counties of Cook, Du Page and Kane, to Aurora. The incorporators and first board of directors are M. M. Miller, Edmund J. Schmidt, Louis Crollan, Leo Michael, and William Klein, of Chicago.

CROOKSTON, MINN.—W. A. Marin, of Crookston, advises us that franchise has not yet been granted to the company, which plans to build from that city to Grand Forks, about 30 miles. Noted on Aug. 22.

RED LODGE, MONT.—The Red Lodge Board of Trade has had surveys made for an electric railway to Bear Creek. Russell Kimball is the Engr.

EXCELSIOR SPRINGS, MO.—Under date of Oct. 7, S. S. McIntire, Secy. of the St. Joseph, Excelsior Springs & Lexington Ry. Co., Box 716, advises us that this line will be six miles long, running from Excelsior Springs to Vibbard, including laterals. Date for receiving bids for construction not yet decided. Edgar Main is Engr., Liberty, Mo. G. P. Lingenfelter is Pres., Denver, Col.; A. M. Bates is Vice-Pres., and C. D. Wale is Treas. Noted previously. Survey is made and right-of-way partly obtained. Capital for construction work is secured.

ST. LOUIS, MO.—The St. Louis, Montesano & Southern Ry. Co. has made application to the St. Louis County Court for a change in its route along the Lemay Ferry Road, south of St. Louis, to the Meramec River. The company holds the franchise granted in Nov., 1906, to the Hillsboro, Kimmswick & Northern Ry. Co. The former franchise held the company to a certain position in the Lemay Ferry Road, and the present company asks permission to cross from side to side at its convenience. The petitioners state they will be ready to begin on the road soon in case the amendment is granted. Company has been granted a six months' extension of time.

AMARILLO, TEX.—J. K. Shireman, Secy. of the Amarillo Elec. Co., is reported as saying that the street railway will be in operation about Nov. 1. The other incorporators are H. A. Nobles, M. C. Nobles, W. E. Kirk, J. C. Paul and W. D. Wharton.

HOUSTON, TEX.—The Galveston-Houston Electric Co. has been organized by the Stone & Webster interests, of Boston, Mass., with an authorized capital stock of $3,000,000 common and $3,000,000 as a holding company, to embrace in its holdings three companies, the Houston Electric Co., which is the terminal company in Houston, owning the Houston St. Ry. system; the Galveston Electric Co., which is a terminal company, owning the Galveston St. Ry. system, and the third is the Galveston-Houston Electric Ry. Co., which is a concern organized for the purpose of constructing an interurban line between Houston and Galveston, a distance of 52 miles. Surveys have been made and considerable preliminary work has been done toward the construction of the interurban. The line will run on a private right-of-way, and actual construction will be begun as soon as various further preliminaries have been arranged. Wesley Wentworth is Gen. Mgr., at Houston.

OKLAHOMA CITY, OKLA.—The Oklahoma City Electric Terminal Co. has been granted a charter. Capital stock, $2,500,000. Guy V. McClure, Charles Combs, Warren E. Moore J. J. Johnson and Fred S. Combs are the promoters. It will build two lines, with total length of twelve miles. Application for a franchise will be made to the City Council soon and work is expected to begin on the new line within the next six months.

Amended articles of incorporation have been filed for the Oklahoma City St. Ry. Co., providing for interurban extension north to Guthrie, south to Norman, and west via Spencer or Choctaw City to Yukon, a total distance of 125 miles, and penetrating the counties of Logan, Oklahoma, Cleveland and Canadian. The capital stock of the company is $3,000,000, and the incorporators include John W. Shartel, Anton Classen, George H. Brauer, Charles Edward, W. F. Cooke and J. M. Owens. The line north from Oklahoma City is now in operation as far as Britton and is being rapidly extended toward Guthrie.

BARTLESVILLE, IND. T.—The Bartlesville Interurban Ry. Co. is reported to have let contract to R. S. GILPILLAN, of Iola, Kan., to grade its line from Bartlesville to Dewey, Ind. T., four miles.

LA JUNTA, COLO.—J. B. Pearce, Secy. and Auditor of the Arkansas Valley Traction Co., states that preliminary surveys for this company's proposed interurban line have been completed and that grading will be started in Jan., 1908. The line will extend from La Junta via Swink and New Dale to Rocky Ford, Colo., a distance of twelve miles. All right-of-way has been secured, together with franchises in La Junta, Rocky Ford and Swink. Contracts for everything except equipment will be let within the next 90 days. The line will be equipped with gasoline motor cars. J. E. Gauger is Pres., Rocky Ford; J. B. Pearce, Secy. and Auditor; H. W. Potter, Treas.; F. T. Lewis, Ch. Engr., La Junta. Noted on Oct. 3.

TRINIDAD, COLO.—The Trinidad Elec. R. R. Co. will build an extension from Sopris to Cokedale. T. F. Grover is Gen. Mgr. Noted on Oct. 3.

VANCOUVER, WASH.—The Washington Ry. & Power Co. has been reorganized and the assets taken over by local capitalists. The officers of the present company are: E. M. Rands, Pres.; J. H. Elwell, Vice-Pres.; H. C. Phillips, Treas., and M. M. Conner, Secy. It is the purpose of the company to continue the work of the old company. The company estimates that it will cost about $75,000 to finish the city system and the first four miles extension.

PULLMAN, WASH.—The Pullman, Lacrosse & Columbia R. R. Co. has been incorporated with $1,500,000 to build and operate a steam, electric or motor road from Pullman via Lacrosse to some point yet to be selected on the Columbia River. The incorporators are J. O. Staats, H. M. Greene, J. H. Clarke, T. H. Shobe, E. S. Knowlton, and J. S. Shrock, all of La Crosse; and J. B. Taggart, of Hay, Wash. Noted on Sept. 5.

EUGENE, ORE.—Committee of business men of Eugene has been appointed, consisting of P. E. Snodgrass, Walter Griffin, D. E. Yoran, A. C. Woodcock and others, to raise $20,000 for an electric railway from Eugene to Portland to run in competition with the Southern Pacific Ry. through the Willamette Valley. A company is to be formed to complete the project for an electric line already begun by A. Welch and associates.

SANTA ROSA, CAL.—The Napa & Lakeport Ry. Co. has filed articles of incorporation. The road is to be constructed from Napa to Lakeport, a distance of 90 miles, with a branch line from Monticello, 14 miles. The capital stock is placed at $2,000,000, of which $110,000 has been actually subscribed. The incorporators are: E. C. Amedee, of San Francisco; and A. J. Brown and W. F. Ansell, of Alameda County.

SAN DIEGO, CAL.—E. B. Webster, Pres. of the South Park & East Side Ry. Co., has filed petitions for the extension of this line on Fourth St., through the northern and northeastern portion of the city. The line is to be about six miles long.

SAN FRANCISCO, CAL.—The Northwestern Pacific R. R. Co. may spend $150,000 in improving its North Shore R. R. electric branch from Sausalito to Marin County points, Cal. F. K. Zook is Ch. Engr., San Rafael, Cal.

LOS ANGELES, CAL.—The Los Angeles Ry. Co. has secured the necessary right-of-way for an electric line from Los Angeles to Glendale, Cal., a distance of six miles, and expects to have the line in operation by Jan. 1, 1908. Howard E. Huntington is Gen. Mgr.

ANAHEIM, CAL.—E. L. Olmstead and others are procuring right-of-way and funds for an extension of the Pacific Elec. Ry. Co.'s proposed extension from Garden Grove to Anaheim. George E. Pillsbury is Ch. Engr., Los Angeles.

MILNER, IDAHO.—D. C. MacWatters, Pres. of the Milner & North Side Elec. Ry. Co., which was recently incorporated in Idaho, with capital stock of $250,000, writes us that contracts for building this line may be let within 30 days. The line will run from Milner in a northwesterly direction through Jerome and Wendell to the Oregon Short Line, at a point near Gooding, about 70 miles. Surveys are made and capital and right-of-way are secured. A few small grading contracts have been let. The railroad will be built through a large irrigation project on north side of Snake River. A bonus per acre has been allowed by the State of Idaho to this company for building the line. D. C. MacWatters, Milner, is Pres.; Paul S. A. Bickel, Milner, is Ch. Engr. The incorporators are Fentress Hill, D. C. MacWatters, Herbert R. Grant, Henry K. Belmont, and C. M. Hapgood, of Milner. Previously mentioned.

## LIGHT AND POWER PLANTS.

*(* denotes that this work is advertised in Engineering News.)*

WINSLOW, ME.—We are officially advised that the AMBURSEN HYDRAULIC CONSTRUCTION CO., 176 Federal St., Boston, Mass., will commence work at once on a dam 37 ft. high and 350 ft. long across the Sebasticook River at Winslow. The dam is owned by the Fort Halifax Power Co., Waterville, Me.

PORTSMOUTH, N. H.—The Bureau of Yards and Docks, Navy Dept., Washington, D. C., has awarded to C. M. LEACH, care Navy Yard, Boston, Mass., contract for the construction of an extension to the powerhouse at the Portsmouth Navy Yard, at $41,363. Noted, Sept. 26.

NEW YORK, N. Y.—Bids are asked until 3 p. m., Oct. 21, by C. B. J. Snyder, Supt. School Bldgs., Bd. Education, for installing electric equipment in additions to and alterations in School No. 59, 57th St., near Second Ave.; also in connection with alterations in School No. 171, 103d and 104th Sts., near Fifth Ave. both in Boro. Manhattan.

NEW YORK, N. Y.—Bids are asked until 11 a. m., Oct. 28, by C. B. J. Snyder, Supt. School Bldgs., Dept. of Education, for installing electric equipment in new Public School No. 5, on Tillary, Lawrence and Bridge Sts., Boro. of Brooklyn.

CLIFTON SPRINGS, N. Y.—Plans are being made by Ford S. Burgett, owner of a grist mill and water power north of this village, for the organization of a company to develop the water power, and to furnish electricity for lighting the nearby villages.

ATLANTIC CITY, N. J.—It is proposed to expend about $30,000 for ornamental light posts to be placed along Atlantic Ave. Arc lamps will be 18 ft. above the sidewalk. J. W. Hackney is City Engr.

MILFORD, PA.—John S[illegible]gelsville, Pa., is reported [illegible] sideration the construction [illegible] power plant on the Delaw[illegible] rows Lock, to furnish po[illegible] mill at Milford.

PHILADELPHIA, PA.—[illegible] Improvement Co., Broad [illegible] decided to expend $1,000,[illegible] ments to its plant here with [illegible] it is stated. Property has [illegible] in West Philadelphia upon [illegible] erected a 3,000,000-ft. ga[illegible] similar holder will be [illegible] ford.

BALTIMORE, MD.—CHA[illegible] HAUSEN, National Marine [illegible] Water Sts., has been awar[illegible] construction of 2-story re[illegible] power-house for use of the [illegible] Frank Memorial Hospital, [illegible] and laundry machinery w[illegible] Louis Levi, American Bldg.

ANNAPOLIS, MD.—The B[illegible] napolis Shore Line R. R. [illegible] erection of a substation at [illegible] about six miles from Annap[illegible] ment will be installed by [illegible] HOUSE ELECTRIC & MFG [illegible] house Bldg., Pittsburg, Pa. [illegible] operating the cars will be su[illegible] power-house of the Consolid[illegible] tric Light & Power Co. [illegible] Baltimore, Mgr., at Westport

FREDERICKSBURG, VA.—[illegible] icksburg Water Power Co. wi[illegible] struction of concrete dam, r[illegible] steel, across the Rappahannock [illegible] at a cost of $60,000, which wi[illegible] with water and mills with [illegible] will be done according to plan[illegible] William C. Whitner, Pres. of [illegible] under his supervision. Co[illegible] awarded contract to J. W. [illegible] lumber for framing necessary to hold the concrete while it is hardening. It is estimated that about 5,000 bbls. of cement will be required in construction.

DAVIDSON, N. C.—The Linde Mfg. Co. will install three 40-HP. and three 60-HP. electric motors for operating the carding, spinning and twisting machinery. It is stated; also two 5-HP. motors to operate machine shop and pump, and equipment for electric lighting in the mill. Supplies will be purchased from Southern Power Co. W. S. Lee, Jr., Ch. Engr., of Charlotte, N. C.

JACKSON, ALA.—The Jackson Light & Power Co. has been organized with $16,000 capital stock and privilege of increasing to $20,000. Company will purchase and enlarge present electric light plant, furnish power for the proposed system of waterworks and for three or four gravel pits near the city, etc. It is proposed to construct a dam across Bassett's Creek, where a 35-ft. head of water may be obtained with a short dam and about 600 HP. obtained. B. H. Warren is Pres.; S. H. Andrews, Vice-Pres., and S. A. Stewart, Secy.-Treas.

PHILADELPHIA, MISS.—The Philadelphia Compress Co. will install an electric lighting plant for machinery, and supplies will be purchased.

NEW ORLEANS, LA.—The Bureau of Yards and Docks, Navy Dept., Washington, D. C., has awarded contract for the construction of a hot water heating plant at the naval station, New Orleans, La., to A. M. LOCKETT CO., LTD., 533 Baronne St., New Orleans, at $17,700. Noted Oct. 10.

LOUISVILLE, KY.—The Louisville Ry. Co. will erect substation, one story, steel, concrete and brick, with composition roof and steam heat. Cost, $12,000. D. X. Murphy & Bro., 250 Fifth St., prepared plans. J. T. Funk, Interurban Terminal Bldg., is Supt.

TOLEDO, OHIO.—A franchise has been granted to the People's Heat & Power Co. to operate a heat and power plant in this city. The company has agreed to spend $[illegible]0,000 on the west side of the Maumee River and $100,000 on the east side within two years. The company is not allowed to merge with any other than the company now controlled by Homer T. Yaryan, who is also the promoter of this company. The city buildings are to be furnished with heat and power at half price.

WARRENSVILLE, OHIO.—Bids are asked by A. R. Callow, Secy. Bd. of Public Service, 105 City Hall, Cleveland, Ohio, until noon, Oct. 18, for installing electric wiring and conduits in the new quadrangle building of the Cleveland Farm Colony, at Warrensville. W. J. Springborn is Pres.

LEBANON, IND.—The Citizens' Electric Light & Power Co., recently incorporated, proposes to construct and equip a light and power plant. R. A. Edwards is Pres.

MISHAWAKA, IND.—The Mishawaka Textile Co. has purchased the north race of the local water-power and will install new machinery for generating electricity for power purposes.

*BAY CITY, MICH.—Bids are asked by the City Comptroller until 3 p. m., Oct. 30, for supplying the city with a steam turbine, generator, exciter, switchboard, boilers (Scotch type), and lamps. William H. Fitzhugh is Supt. municipal lighting plant.

CHICAGO, ILL.—Shepley, Rutan & Coolidge, Archs., 84 Van Buren St., are preparing plans for a 3-story power-house, 160 × 145 ft., to be erected on Quarry St., for the Chicago Edison & Commonwealth Co., 139 East Adams St. Brick and steel will be used in construction.

RED WING, MINN.—The State Board of Control has awarded contract for installing an addition to the power plant at the Red Wing Training School to the NORTHERN ENGINEERING CO., 8 Central Ave., Minneapolis, for $2,198. The contract for rewiring the buildings was awarded to HARTIG & HELLIER, 404 First Ave., South Minneapolis, for $4,000.

PIERRE, S DAK.—See under Manufacturing Plants.

VICTOR, NT.—It is reported that H. C. Hodge, of ma, Wash., is interested in the construct of an electric light plant to light Steven and Victor. He expects to develop the er power in Big Creek Canyon west of ictor.

AURORA —The Aurora Light, Power & Refriger Co., recently incorporated, will erect ildings at cost of $10,000 to $15,000. Woodfill, Jr., is Pres. and Treas.; S Post, Vice-Pres.; J. M. Hawkins, Supt.

PINE BLUFF, ARK.—The Central Arkansas Electric Railways Co. is considering construction of electric power plant for its proposed way, it is stated. Plans to purchase mines and build power plant are considered, but nothing at the m definite has been determined as yet. A. M. Van Auken Ch. Engr.

BENTON ILLE, ARK.—The BENTON COUNTY HARDWARE CO. has contract at $10,850 to build electric power-house here.

LITTLE ROCK, ARK.—Arrangements are being made by the St. Louis Iron Mountain & Southern Ry. Co. to construct a power plant to furnish heat and light for the Union Station now under construction; light for passenger yards, heat for passenger equipment and compressed air for cleaning and brake testing. The equipment will consist of two 240-HP. water-tube boilers, two 75-HP. direct-connected generators, two exciters, one small generator and one air compressor having a capacity of 800 cu. ft. per minute. The construction and installation will be done under the direction of Westinghouse, Church, Kerr & Co., 10 Bridge St., New York, N. Y. P. Carroll, Little Rock, is Div. Engr.

BEEVILLE, TEX.—It is stated that E. J. Kinkler proposes to install electric plant for lighting opera-house. About 300 lights will be furnished. The machinery has not been purchased.

OKLAHOMA CITY, OKLA.—We are officially advised that the Pintsch Compressing Co., 2 Rector St., New York, N. Y., will construct a gas plant here to manufacture gas for heating and lighting cars. Contracts for the work are being let. All equipment will be furnished by the company. J. A. Dixon, New York, is Gen. Supt.

RICO, COLO.—We are officially advised that the United Rico Mines Co. has purchased the Rico power and light plant from B. N. Griffing, and it is the intention to enlarge and extend the plant to develop sufficient power to operate the various mills and mines owned by the company within the radius of three miles. It will require considerable electric equipment. A. B. Roeder is Gen. Mgr.

COLTON, WASH.—The City Council has let contract to the WASHINGTON-IDAHO LIGHT & POWER CO. for street lighting and power for pumping the city water. The city has given the company a franchise for running its wires within the city limits. M. J. Shields is Pres.

EUGENE, ORE.—T. G. Hendricks and F. L. Chambers have filed rights on the waters of the McKenzie River, near what is known as Hayden's Bridge, which is about six miles in a direct line from Eugene. An engineer has been making measurements and securing data as to the flow of water during the dry season, and will continue his investigations during the high water and flood season of the winter. When all data have been secured, work on the construction will be started. This water power will develop at least 2,000 HP., which will be transferred to Eugene for all purposes.

FRESNO, CAL.—Bids are asked at the office of the Treasury Department, Washington, D. C., until Oct. 30, for furnishing light fixtures for the public buildings at Fresno, Cal., under the control of the Treasury Department.

PORTERSVILLE, CAL.—The Mount Whitney Power Co., of Tulare, is contemplating extending its transmission lines into the northern part of Kern County to furnish electricity to use in the development of water for irrigating purposes. The line will be extended from Portersville to Wasco. B. M. Maddox, Visalia, Cal., is Mgr.

LOS ANGELES, CAL.—The EDISON ELECTRIC CO. has been awarded the contract for furnishing power necessary for construction of the Elizabeth Lake tunnel on the line of the Owens River aqueduct. The contract will involve the payment of about $350,000 by the city of Los Angeles. The bid of the Edison Electric Co. was the only one received. A. L. Selig is Gen. Mgr., Los Angeles.

REDONDO, CAL.—C. C. MOORE has been awarded contract to install second and third units at the power plant of the Pacific Light & Power Co. at Redondo. The walls are of concrete, 80 × 200 ft., and 80 ft. high. Eighteen boilers of 550 HP. each, burning 1,500 bbls. of oil daily, furnish the motive power. The plant will generate 25,000 HP., which will be used to operate the Los Angeles lines of the Pacific Electric Ry., as well as its interurban lines. G. C. Flint is Ch. Mechanical Engr. The plant is expected to be in service in about three months.

TORBROOK, N. S.—The Londonderry Iron Mining Co., which recently acquired the iron deposits at Torbrook, is preparing to install an electric system for operating its mines. The power will be drawn from the Nictaux Falls, about a mile from the property. The estimated cost of this plant is between $40,000 and $50,000.

REVELSTOKE, B. C.—Contract for additional machinery for the Revelstoke power plant and gas producer has been awarded to the CANADIAN GENERAL ELECTRIC CO., 81 St. Peter St., Montreal, Que., at $25,762. The plant will consist of a generator of 60-cycle, 150-KW. type, 6 r. p. m., weighing with exciter 16,300 lbs.

SHERBROOKE, QUE.—The Special Light Committee will proceed with erection of an electric plant at Westburg Basin, $200,000 having been voted by the citizens for that purpose some time ago. Ross & Holgate, North British and Mercantile Bldg., Montreal, have been engaged as Engrs., and will have plans prepared immediately, so that a portion of the dam may be laid this fall.

SUDBURY, ONT.—The Ontario Railway and Municipal Board has approved of the application of the by-law of the town providing for extension of the water-works and electric lighting system. Bonds to the amount of $10,000 will be issued.

## BRIDGES.

*(* denotes that this work is advertised in Engineering News.)*

HEMPSTEAD, L. I., N. Y.—Bids are asked by John H. O'Brien, Comr. Water Supply, Gas and Electricity, New York, until 2 p. m., Oct. 18, for constructing piers for two bridges over the Wantagh stream, and to do certain grading of Seaman's Road, in the town of Hempstead. H. Luther Weeks is Town Clk.

JERSEY SHORE, PA.—The Board of Grounds and Buildings, Harrisburg, has awarded the contract for the construction of a bridge across the Susquehanna River at Jersey Shore, to the YORK BRIDGE CO., at $54,945. The PENN BRIDGE CO. has been awarded the contract for a bridge across the Nescopeck Creek, at Nescopeck, Pa.

*PHILADELPHIA, PA.—Plans and specifications are on file at the office of Engineering News, New York, for bridges to be constructed in Philadelphia. Bids are asked until Oct. 23.

*WILLIAMSPORT, MD.—Mason D. Platt, Engr., 16 South Market Sq., Harrisburg, Pa., writes us that in the advertisement published in this and in the last issues of Engineering News for reinforced concrete bridge to be erected at Williamsport, the following corrections are to be made: Number of spans, 16 instead of 15; and time for opening bids, 2 p. m., Oct. 30, instead of noon.

FREDERICK, MD.—DRAKE & STRATTON CO., West End Trust Bldg., Philadelphia, Pa., has been awarded the contract for substructural work and the McCLINTIC-MARSHALL CO., Park Bldg., Pittsburg, Pa., for superstructural work on bridge to be constructed over the Monocacy River at Frederick Junction.

RICHMOND, VA.—Bids are asked until 9 a. m., Oct. 21, by Charles W. Childrey, Comr. Henrico County, for the construction of a reinforced concrete bridge across the Chickahominy River, on the road between Richmond and Ashland, Va. Charles W. Childrey is Comr. of Henrico County; W. L. Lumkin is Comr. of Hanover County.

MERIDIAN, MISS.—The city and various railroad companies with lines entering Meridian have agreed to construct an overhead bridge or viaduct to span tracks separating city proper from the South Side. Estimated cost, about $100,000.

VICKSBURG, MISS.—We are officially advised that the YOUNG BRIDGE CO., Nashville, Tenn., has been awarded the contract by the Board of Aldermen for the construction of the concrete bridge on Cemetery Road, at $3,796, and for a bridge on North Cherry St., at $4,850. H. J. Trowbridge is Clk. Bd. of Aldermen; W. A. Kirkpatrick, Jackson, Miss., is Designing Engr.

MT. WASHINGTON, KY.—The CHAPIAN BRIDGE CO. has been awarded the contract for the erection of an iron bridge across Salt River at Greenwell Ford, three miles south of this city, at $9,990.

ASHLAND, OHIO.—Bids are asked until Nov. 4 by the Board of County Commissioners for furnishing material and constructing the McClintock Bridge in Clear Creek Township, to consist of one 45-ft. steel superstructure and stone abutments. E. B. Westover is County Auditor; F. L. Neiderheiser is City Engr.

CINCINNATI, OHIO.—The Committee on Streets has recommended construction of a bridge over the canal, replacing the Mohawk Bridge at Central Ave. Estimated cost, $25,720.

TOLEDO, OHIO.—Bids are asked until 10 a. m., Oct. 30, by the Commissioners of Lucas County for the construction of two concrete masonry abutments for the bridge over Ten Mile Creek, on Ottawa Terrace, Washington Township. L. B. Bolley, Frank Wortsmith, H. F. Van Fleet, Comrs., Lucas County.

HAMILTON, OHIO.—We are officially informed that on Oct. 8 the CENTRAL STATES BRIDGE CO., 601 Beecher St., Indianapolis, was awarded the contract by the Board of County Commissioners for the construction of the superstructure of the bridge across Two Mile Creek, on Seven Mile Pike, at $5,292. Charles Pabst is County Audr.; L. A. Dillon is Designing Engr. Contract for work on substructure was not let, as bids were above the estimate. This work will be readvertised.

CHICAGO, ILL.—Bids are asked until Oct. 26, by John J. Hanberg, Comr. Pub. Works, for furnishing material and constructing the substructure for bascule bridge over the north branch of the Chicago River near Kinzie St., with all necessary abutments and approaches, also the superstructure of said bridge, including all machinery necessary thereto.

CAIRO, ILL.—Bids are asked until 11 a. m., Oct. 21, by W. B. Thistlewood, City Engr., for paving with brick and otherwise improving Second St., from the west line of Ohio St. to the west line of Washington Ave.

MILWAUKEE, WIS.—The NEWTON ENGINEERING CO., 106 Mason St., has been awarded the contract by the County Board for construction of the Grand Ave. viaduct, at $372,000. Charles G. Poetsch is City Engr.

MINNEAPOLIS, MINN.—The contract for the construction of the new bridge across Minnehaha Glen, has been awarded by the Trustees of the Minnesota Soldiers' Home to BAYNE & HEWITT, 202 Commercial Bldg., at $40,000.

LINCOLN, NEB.—Plans for the extension of the Belknap St. viaduct have been submitted to the City Engineer. It is proposed to extend the viaduct to the east over the Northern Pacific and Lake Superior & Transfer Ry. tracks. The entire extension will be about 742 ft. long, while the present viaduct is 776 ft. in length. The cost of the proposed improvement will be about $60,000, of which the Northern Pacific is to bear $50,000 and the Terminal $10,000. The addition is to be of steel as is the part at present in use.

TEXARKANA, TEX.—A viaduct will be built over the St. Louis, Iron Mountain & Southern Ry. tracks, from Broad St. to College Hill. The proposed structure will be nearly a quarter of a mile long, with a total width of 29½ ft., the main roadway being 24 ft. wide, with a 5½-ft. sidewalk. Estimated cost, $40,000.

SULPHUR SPRINGS, IND. T.—Bids are asked until 10 a. m., Oct. 28, by Superintendent of the Platt National Park, Sulphur Springs, for the construction of a suspension foot-bridge at Bromide Springs in the park.

WALLA WALLA, WASH.—Bids are asked by the Committee on Streets and Public Improvements, until 2 p. m., Oct. 28, for the construction of a bridge over Mill Creek, in North Fourth St.

PORTLAND, ORE.—ROBERT WAKEFIELD, Albina, the only bidder, has been awarded the contract by the County Commissioners for repairs to the Burnside St. bridge, at $29,954. Douglas W. Taylor is City Engr.

Bids are asked by A. L. Barlus, City Audr., until 4 p. m., Nov. 15, for the construction of a steel bridge on Union Ave., from 112 ft. south of the south line of East Glisan St. to a point 408 ft. southerly therefrom. Douglas W. Taylor is City Engr.

GEORGETOWN, CAL.—The lowest bid received Sept. 27 by the Board of Supervisors for the construction of a bridge over Lotus Creek, was that of Hyde, Harjes & Co., 13 Stewart St., San Francisco, at $3,463.

REDDING, CAL.—Bids are asked until 10 a. m., Nov. 8, by the Board of Supervisors, for the construction of a bridge across the Sacramento River, about one mile above Castle Crag, in Shasta County. S. N. Witherow is Clerk of Bd. of Supervisors.

SAN DIEGO, CAL.—The Atlantic, Gulf & Pacific Co., Monadnock Bldg., San Francisco, was the only bidder for the construction of a reinforced-concrete bridge known as the Ponasquitos Bridge, at $10,990.

WEISER, IDAHO.—Bids are asked until 10 a. m., Oct. 18, by Frank E. Smith, Clk. Bd. County Comrs., for the construction of a steel girder bridge across Mann's Creek, about five miles from Weiser, and for the construction of a steel wagon bridge across the Weiser River, at the site of the present bridge on the county road between Cambridge and Salubria.

## BUILDINGS.

PORTLAND, ME.—Bids are asked by Capt. F. J. Morrow, Q. M., 478½ Congress St., Portland, until 11 a. m., Nov. 5, for constructing a double barrack building at Fort Williams and a single barrack at Fort McKinley, Me.

SALEM, MASS.—The Executive Council has approved plans for a battalion armory in Salem and has passed an order authorizing the issuance of bonds to the amount of $200,000 to pay for the cost of the same. Lieut.-Col. Andrew Fitz, Capt. W. H. Perry, Thomas Pinnock, Mayor, and Thomas L. Davis, all of Salem, are interested.

Contracts to build the brick high school buildings, from plans by Kilham & Hopkins, Archs., 9 Park St., Boston, have been let as follows: WOODBURY & LEIGHTON, 166 Devonshire St., Boston, building, $191,971; EVANS-ALMIRAL CO., Boston, heating appliances, $9,500; ALEXANDER DUNCAN & CO., 37 Union St., Boston, hot water heating plant, $34,375. Thomas Pinnock, Mayor, is Chn. of High School Comn. Other bidders were: J. N. & V. S. Peterson, Salem, $196,000; Pitman & Brown, Salem, $212,000; McGahey & O'Connor, Boston, $203,527; George A. Fuller Co., Boston, $198,859; Ambrose Stannard, New York, $222,700; S. R. Dexter, Beverly, $226,850; Mack & Moore, Boston, $208,400; C. L. Fellows Co., Boston, $208,026; Maguire & Penniman, Boston, $206,624.

NORTH GROSVENOR DALE, CONN.—It was erroneously stated in the last issue of Engineering News that A. Fales & Son, South Framingham, Mass., had secured contract for constructing the Tourtellotte Memorial High School building. The contract for this work was awarded to ROBERT WILSON, Ford Bldg., Boston, Mass.

NEW YORK, N. Y.—The contract for the Coney Island Hospital has been let by R. W. Hebberd, Comr. of Public Charities, to ROBERT HENINGHAM, Brooklyn. It will be on Ocean Parkway near Coney Island, and will cost $328,475.

NEW YORK, N. Y.—Bids are asked until 11 a. m., Oct. 28, by C. B. J. Snyder, Supt. School Bldgs., Bd. of Education, for installing heating and ventilating apparatus for addition to and alterations in Public School No. 19, on the east-side of Greenleaf Ave., between Post Ave. and Floyd St., West New Brighton, Boro. of Richmond.

NEW YORK, N. Y.—Schwartz & Gross, Archs., 347 Fifth Ave., advise us that the Charter Construction Co., 198 Broadway, will erect a 6-story flat building at Broadway and 127th St., at a cost of $125,000. Building will be of brick, stone and steel construction.

The Knickerbocker Trust Co., 66 Broadway, will erect a 22-story office building on the corner of Broadway and Exchange Pl., at a cost of about $1,700,000. The plot measures 65.10 × 127.1 ft. The building now occupying the site is being wrecked. McKim, Mead & White, 160 Fifth Ave., are Archs.

The Armory Board has selected the plans of Walker & Morris, Archs., 24 East 23d St., for the proposed armory for the Second Battery, N. G., N. Y., at the corner of Franklin Ave., and East 166th St., Boro. of the Bronx. Guidone & Gilardi, 1 Madison Ave., on Oct. 7 submitted the lowest bid for construction. Harrie Davis is Secy. of the Armory Board. Noted fully Oct. 10.

NEW YORK, N. Y.—We are officially advised that bids will be received about Nov. 1, for constructing a 4-story brick, stone and steel theater in Brooklyn for the Orpheum Co. The main building will be 100 × 150 ft., with an L 25 × 100 ft. Cost, $200,000. William H. McElfatrick, 1402 Broadway, is Arch.

The Commercial Trust Co. has had plans prepared for a 6-story banking building to be erected at Broadway and 41st St., extending west to Seventh Ave. The building will be 41 × 140 ft.

The only bid received Oct. 14 by Joseph Bermel, Pres. Boro. of Queens, for rebuilding the interior of the Queens County courthouse at Long Island City, together with all the work incidental thereto, excepting all that provided for in the previous contract, was from Charles Wille, 156 Fifth Ave., New York, at $295,460.

NEW YORK, N. Y.—Bids are asked by C. B. J. Snyder, Supt. School Bldgs., Board of Education, until 3 p. M., Oct. 21, for installing heating and ventilating apparatus of addition to and alterations in Public School No. 80, on the west side of West 17th St., 145 ft. south of Neptune Ave., Boro. of Brooklyn: Public School No. 129, on north side of Gates Ave., 275 ft. west of Stuyvesant Ave., Boro. of Brooklyn. Addition to Public School No. 41, on the east side of Greenwich Ave., Boro. of Manhattan; addition to Public School No. 59, on the south side of 57th St., about 100 ft. west of Second Ave., Boro. of Manhattan.

We are officially advised that Stockton B. Colt, 287 Fourth Ave., and Thornton Chard, 105 East 22d St., are preparing plans for a 4-story police station to be erected at Greenwich and Washington Sts. The structure will be built of brick and stone and will cost $230,000. Theodore A. Bingham is Police Comr.

NEW YORK, N. Y.—The following bids were received by the Department of Public Charities, Oct. 14, for the construction and completion of six ward buildings of the Sea View Hospital, situated on the south side of the Manor Rd., Township of Castleton, Boro. of Richmond: O'Connell & Hanna, 271 West 125th St., $984,000; Thomas Cockerill & Son, 147 Columbus Ave., $1,064,000; P. J. Carlin Construction Co., Kent Ave., Brooklyn, $892,425; Thomas B. Leahy Building Co., 1 East 42d St., $964,743; D. J. Ryan, 723 Third Ave., Brooklyn, $932,000; LUKE A. BURKE, SONS & CO. (awarded contract), 25 West 42d St., $873,000. Robert W. Hebberd is Comr.

William A. Swasey, Arch., 40 West 33d St., has let the general contract to JAMES STEWART & CO., 135 Broadway, for constructing a 12-story brick and stone bachelor apartment hotel, 90 × 175 ft., on 56th St., between Sixth and Seventh Aves. Cost $800,000.

Clinton & Russell, 32 Nassau St., are finishing plans for doubling the capacity of the Hotel Astor, on Times Sq. The addition will cost $3,000,000. It will extend back 100 ft. on 44th and 45th Sts. The enlarged structure will be 200 × 200 ft.

NEW YORK, N. Y.—Bids are asked by Robert W. Hebberd, Comr. of Public Charities, until 2.30 p. m., Oct. 24, for furnishing all the labor and materials required for completely remodeling the present annex building, situated on the grounds of the Kings County Hospital, Clarkson St., near Albany Ave., Boro. of Brooklyn; or for remodeling the present annex building, and for the erection and entire completion of two additions to said building.

NEW YORK, N. Y.—Bids are asked until noon, Oct. 31, by J. A. Bensel, Comr. Docks and Ferries, for building a new ferry house for the Staten Island Ferry, at the Manhattan terminal, at the foot of Whitehall St., Boro. of Manhattan.

BAYONNE, N. J.—The contract to erect School No. 9 has been awarded to W. H. & F. W. CRANE, of New York, N. Y., at $111,649. Other bids received are stated to have been as follows: M. T. Connolly, $135,000; James MacArthur, $116,000; Walter Isetts, $112,000; E. M. Waldron, $115,285; Richard E. Cunningham, $120,000; Cramp & Co., $116,525; Calumet Construction Co., $114,468; John J. O'Leary Co., $118,500.

NEWARK, N. J.—Bids are asked until noon, Oct. 21, by the State Military Board at the office of Adjutant-Gen. R. H. Breintnall, State House, Trenton, N. J., for constructing an armory for the First Troop at Newark.

PITTSBURG, PA.—Palmer & Hornbostel, 63 William St., New York, N. Y., will receive new bids in about 30 days, for three additional buildings, at Schenley Park, Pittsburg, for the Carnegie Technical Schools. Cost, $1,000,000.

DANVILLE, PA.—Lynch Bros., Lippincott Bldg., Philadelphia, submitted the lowest bid for erection of additions to the Danville Hospital for the Insane, at Danville. Amount of bid, $186,197. T. P. Reitmeyer, 360 Market St., Williamsport, Pa., is Arch.

NEW CASTLE, PA.—We are officially advised that W. G. Eckles, Lawrence Trust Bldg., New Castle, is preparing plans for a 3-story brick and stone high school to be erected here. Bids will be received about Jan. 1, 1908. The building will be 200 × 190 ft., and will cost $250,000.

BALTIMORE, MD.—Contracts have been awarded to CHARLES L. STOCKHAUSEN, National Marine Bank Bldg., Gay and Water Sts., for construction of a group of buildings for the Dr. Samuel Leon Frank Memorial Hospital on the Hebrew hospital grounds at Broadway and Hopkins Ave. Structures include a 4-story administration building, 4-story ward building, laundry and 2-story boiler-house. Construction will be of brick with stone and terra cotta trimmings, reinforced concrete work, structural iron and steel, interior marble and tile work. Cost, $150,000; Louis Levi is Arch, American Bldg.

WASHINGTON, D. C.—Bids were received as follows, Oct. 10, at the office of Bernard R. Green, Officer in Charge of Construction of the National Museum Bldg., Washington, for glass for the new building: (a) basement, only, wood frames; (b) first and second stories, c.-i. or bronze or copper frames; (c) third story, wood frames: J. F. Blanchard Co., Fuller Bldg., New York, (a) $92,-778, iron; $156,061, copper; A. Wilt & Sons, 723 North Front St., Philadelphia, (a) $20,-000, (c) $15,200; Sloane & Moller, 316 East 65th St., New York, (a) $18,960, (b) $131,430, (c) $14,370; John W. Rapp, 1 Madison Ave., New York, (a) $11,874, (b) $90,398, (c) $10,-728; J. C. McFarland & Co., Chicago, (a) $32,724, copper, (b) $97,130; Hecla Iron Works, Brooklyn, N. Y., (b) $119,900; David Lupton Sons Co., Allegheny and Tulip Sts., Philadelphia, (b) $76,594; Snead & Co., Iron Works, foot of Pine St., Jersey City, N. J., (b) $131,800.

PORTSMOUTH, VA.—Bids are asked by James Knox Taylor, Supervy. Arch., Treasury Dept., Washington, D. C., until 3 p. m., Nov. 22, for construction, including plumbing, gas piping, heating apparatus, electric conduits and wiring, of the U. S. post-office and custom-house at Portsmouth.

NEW ORLEANS, LA.—Bids are asked until 11 a. m., Nov. 2, by the Bureau of Yards and Docks, Navy Dept., Washington, D. C., for erecting a dispensary building and accessories for the naval station, New Orleans. Specifications are on file at the office of Engineering News, New York.

NEW ORLEANS, LA.—Bids are asked until noon, Oct. 21, by Dr. E. S. Lewis, Vice-Pres. Board of Administrators, Charity Hospital, New Orleans, for the erection and completion of a 6-story fireproof hospital, to be known as the Delgado Memorial, in the city of New Orleans, La. Crosby & Henkel, 706 Morris Bldg., New Orleans, are Archs.; Edwin Marks is Secy. and Treas.

Bids are asked until 11 a. m., Nov. 5, by Col. F. L. Denny, Q. M., U. S. Marine Corps, Washington, D. C., for construction at the naval station, New Orleans, La., of marine barracks and officers' quarters. De Buys, Churchill & LaBoulisse, Hibernia Bank Bldg., are Archs.

CHATTANOOGA, TENN.—J. Fred Ferger, Chn. Bldg. Com., Y. M. C. A., has adopted plans prepared by R. H. Hunt, Arch., News Bldg., for erection of building, 110 × 120 ft., five stories high, of fireproof construction Cost, about $150,000.

COVINGTON, KY.—John R. Copping has had plans prepared by James Gilmore, Fourth National Bank Bldg., Cincinnati, Ohio, for erection of store building, seven stories. Cost, $150,000.

CINCINNATI, OHIO.—Samuel Hannaford & Sons, Hulbert Block, have been retained to prepare plans for a 3-story and basement brick college building for the St. Xavier College, Rev. A. A. Dierkes, Pastor. Estimated cost, $200,000.

Plans are being prepared by Gustav W. Drach, Arch., Union Trust Bldg., and Edward H. Hannaford, Pickering Bldg., for a 2½-story high school building, 180 × 70 ft., and 50 × 30 ft., to be erected on Woodward St., for the Board of Education. William Grautman, Clerk, City Hall. Pressed brick, terra cotta and reinforced concrete will be used for construction. Bids will be received in about 60 days.

INDIANAPOLIS, IND.—We are officially advised that bids will be received about Oct. 26 for erecting a brick and terra-cotta building here for the Y. W. C. A. The building will be in two sections, the front section being a 4-story building and the rear section two stories. The main or 4-story building will have a frontage in Pennsylvania St. of 85 ft. and a depth of 120 ft. The rear building will be 71 × 80 ft. D. A. Bohlen & Son, Majestic Bldg., Indianapolis, Ind., are Archs.

TERRE HAUTE, IND.—Bids are asked by the Commissioners of Vigo County, until noon, Oct. 30, for construction of a jail and sheriff's residence. J. W. Denehie is County Auditor.

QUINCY, ILL.—V. JOBST & SONS, of Peoria, Ill., have been awarded the contract for building two cottages at the Quincy Soldiers' and Sailors' Home by the Trustees. The contract was awarded for $103,600.

CHICAGO, ILL.—Huehl & Schmid, 163 Randolph St., have let contracts for building a Masonic Temple on Oakley Ave., near Madison St., to BULLEY & ANDREWS, 115 Dearborn St., for masonry, and carpentry to W. H. WILLIAMS, 137 South Sacramento Ave. Building will be erected for the West Side Masonic Temple Association. It will be 4-story, 141 × 170 ft., of slow burning construction, with pressed brick and stone fronts, composition roof, oak finish, steam heat, marble and mosaic work, wiring for electric light, and cost will be $165,000.

Holabird & Roche, Archs., 100 Jackson Boulevard, have awarded the general contract to George A. Fuller & Co., 204 Dearborn St., for erecting a 9-story brick, Bedford stone and steel club house, 67 × 176 ft., at corner Michigan Ave., and Monroe St., for the University Club. W. C. Boyden, Pres., and J. C. Harding, Secy., 116 Dearborn St. Cost, $1,000,000.

The following contracts have been let by William R. Gibb, Arch., 169 Jackson Boulevard, for building an 8-story mercantile building, 75 × 117 ft., of pressed brick, stone and fireproof construction, at the corner of Green St. and Jackson Boulevard, for W. D. Schmidt & Co., 147 Fifth Ave.: Masonry, JACOB RODATZ, 217 La Salle St.; carpenter work, JOSEPH WEHLING, 3536 Emerald Ave.; steam heating, HARRY PECKHAM, JR., 27 North Canal St.; plumbing, William J. BROWN, 1958 North Halsted St. Cost, $125,000.

It is reported that the Board of Education contemplates erecting during the coming year the following buildings at a total cost of $2,872,000: Irving Park High School, 41st, Court and Grace Sts., $50,000; Washburne School, 14th and Jefferson Sts., 17-room addition, $175,000; Brentano School, Fairfield and Diversey Aves., 12-room addition, $140,000; Jackson School, Damon and Aberdeen Sts., 20-room addition, with assembly hall and gymnasium, $190,000; Bowen High School 89th St. and Marquette Ave., $500,000; Dante School, Desplaines and Ewing Sts., 15-room addition, with assembly hall, $215,000; Jefferson School, Elburn Ave. and Laflin St., 9-room addition, $170,000; Howe School, Laurel Ave. and Superior St., 12-room addition, with assembly hall, $140,000; Tilton School, 42d and Park Aves., new 20-room building, $210,000; Farragut School, 23d St. and Spalding Ave., 16-room addition, with assembly hall, $150,000; Andersenville School, Ashland Ave. and Foster St., new 26-room building to replace branch of Goudy School, $210,000; Nobel School, 41st Ave. and Hirsch St., new 22-room building, $222,000. Lewis L. Larson is Secy. Bd. of Education.

EAU CLAIRE, WIS.—James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., has awarded contract for the construction of the post-office building at Eau Claire, Wis., to CHARLES W. GINDELE, 3333 La Salle St., Chicago, Ill., at $113,500; to be completed April 1, 1909.

ST. LOUIS, MO.—Mauran, Russell & Garden, Archs., Chemical Bldg., have let general contract to C. M. ROSBOROUGH, Security Bldg., for erecting a 7-story brick and stone mercantile building, 50 × 150 ft., at 13th and Washington Aves., for Lindell Gordon, 115 North Eighth St. Cost, $125,000.

MARYVILLE, MO.—J. H. Felt & Co., Archs., Shukert Bldg., Kansas City, Mo., have let general contract to D. E. MARSHALL, Maryville, for a 4-story school building for the Northwest Missouri Normal School. J. E. Cook is Pres., Maryville. Estimated cost, $300,000.

•TYLER, TEX.—Bids are asked until 3 p. m., Nov. 25, by James Knox Taylor, Supervy. Arch., Treasury Dept., Washington, D. C., for construction, including plumbing, gas piping, heating apparatus, electric conduits and wiring, of an extension, etc., to the U. S. post-office and court-house at Tyler.

LOS ANGELES, CAL.—The Consolidated Realty Co., Los Angeles, will erect a 10-story reinforced concrete building on Sixth and Hill Sts., with a frontage of 150 ft. on Hill St., and 126 ft. on Sixth St. The building will be lighted by electricity, steam heated, cleaned by the vacuum air-cleaning system and equipped with four passenger and one freight elevators. C. LEONARDT, H. W. Hellman Bldg., has the contract for excavating for foundation. Other contracts are not awarded. The building will cost $500,000. Harrison Albright is Arch., Laughlin Bldg.

SAN FRANCISCO, CAL.—John Cotter Pelton, Arch., 1767 Geary St., has completed plans for Armaund Cailleau, Van Ness Ave. and California St., for a 12-story building to be erected on the corner of Grant Ave. and Sutter St. The building is to be known as the Tower Building, and will cost $150,000. The lot is 40 × 40 ft. The building will be Class A, and will be built of steel. The outside will be finished in white stone.

The California Academy of Science has decided to erect a structure upon the site of its former building, destroyed by the fire of April, 1906, at a cost of $300,000. William H. Crocker is Pres.

Application has been made by Claus Spreckels for a permit to erect a Class C office building six stories in height on the corner of Fremont and Market Sts. The structure will cost $120,000.

The University Regents will erect a 4-story Class C warehouse on First St., between Market and Mission Sts. It will cost $140,000.

## WATER SUPPLY—IRRIGATION.

*(• denotes that this work is advertised in Engineering News.)*

BAINBRIDGE, N. Y.—E. F. Munson, 12 Sheldon St., Norwich, N. Y., has been engaged to prepare plans for a reservoir and filtration plant.

NEW YORK, N. Y.—We are officially advised that Charles Hansel & Co., 43 Wall St., have been engaged by the North Platte & Encampment Canal Co. to prepare the surveys, plans and estimates and to take charge of the construction of a canal for the irrigation of 93,000 acres of land extending from Saratoga, Wyo., south to the Colorado State line. This work will involve the building of a canal with a capacity of 1,000 second ft., and it will carry with it the development of a hydro-electric plant of considerable magnitude.

•HIGHLANDS, N. J.—Bids were received by the Borough Council on Sept. 25 for erecting municipal water-works. The work includes power-house and foundations, standpipe, pipe line, compound duplex steam pumps, air compressor, wells and receiving tank and steam boiler and piping. Tunis H. Lane is Boro. Clk. Runyon & Carey, 122 Market St., Newark, N. J., are Engrs. We are officially advised that the bids were as follows: R. B. Carter Co., 26 Cortlandt St., New York City, $33,113; Land-Wharton Co., Philadelphia, Pa., $34,500; Harrison Construction Co., 837 Broad St., Newark, N. J., $29,989; H. A. Miller, 1501 Rodney St., Wilmington, Del., $28,944; Atlantic Construction & Supply, Atlantic City, $31,344; McCOY ENGINEERING CO., 9 East Lexington St., $27,777 (awarded contract).

FORT HANCOCK, N. J.—HUNGERFORD & TERRY, Pennsylvania Bldg., Philadelphia, Pa., have been awarded the contract for the construction of a filtration plant, at $6,520.

CAMDEN, N. J.—Bids are asked until 8 p. m., Dec. 17, by the Water Commissioners, for improving the present artesian water supply system and adding to present supply of 17,000,000 gals. at least 5,000,000 gals. daily. Joseph Potter, Chn., Water Dept.

FORT DADE, FLA.—The R. D. COLE MFG. CO., Newman, Ga., has been awarded the contract for the construction of a steel tank and trestle, at $17,854.

BRISTOL, TENN.—J. W. Lockhart, City Engr. and Water Comr., writes us that the city has awarded the contract for the pipe necessary to lay six miles of 16-in. pipe to a new water supply, to the LYNCHBURG FOUNDRY CO. and the AMERICAN CAST-IRON PIPE CO. The new source of supply will be a gravity supply, furnishing the city with 2,500,000 gallons per day. R. L. Blesius, Supt. of Construction, has charge of the work.

EAST LIVERPOOL, OHIO.—The Ohio Oil Co., it is stated, has completed plans for the construction of a pumping station at Negley on the Clever Guy track. Large storage tanks are to be built. The pumping station is to be the largest of its kind in the eastern part of the State, it is said.

COLUMBUS, OHIO.—We are officially advised that the following bids were received Oct. 4 by the Board of Public Service for the East Side sewage disposal plant: D. W. McGRATH, New First National Bank Bldg., $18,373 (awarded contract); Bert Walter, 361 Buttles Ave., $19,149; E. K. Hibbs, 517 West Fifth Ave., $21,058. The estimate of John H. Gregory, Engr.-in-Charge, was $17,701.

WARSAW, IND.—Bids will probably soon be asked by S. C. Dickey, Pres. Winona Assembly, for extending the intake pipes to the center of the lake to furnish water to this city.

TIPTON, IND.—Bids are asked until 1 p. m., Oct. 21, by P. O. Duncan, Ditch Comr. and Surv., for the construction of 10,900 ft. of tile ditch from 8 ins. to 20 ins. in diameter.

DE PERE, WIS.—Bids are asked until Oct. 25 by the Board of Water Commissioners for supplying about 4,600 ft. of 6-in., 8-in. and 10-in. cast-iron pipe and specials; also for valves and hydrants and laying the same on the proposed water-works extension.

ELMWOOD, WIS.—The contract for the water-works system has been awarded to W. C. FRASER, Rochester, Minn., at $8,-150.

BOONE, IOWA.—Bids are asked until 1 p. m., Oct. 25, by E. F. Jones, County Audr., for the construction of County Drain No. 38. Sec. 1, to consist of 725 ft., 14-in. tile, work to be completed June 1, 1908. Sec. 2, to consist of 1,000 ft., 12-in. tile, work to be completed June 1, 1908. Sec. 3, to consist of 1,200 ft., 10-in. tile, work to be completed June 1, 1908.

ONAWA, IOWA.—CALLAHAN BROS. & KRATZ, Omaha, Neb., have been awarded the contract by the County Board of Supervisors for the McCandless ditch, eight miles in length, in the northwestern part of Monona County, at $8.69 per cu. yd.

ST. PAUL, MINN.—The NORTHWESTERN DRAINAGE CO., Grand Rapids, Mich., has been awarded the contract by the State Drainage Board for State drainage ditch No. 47, Marshall County, and Nos. 48, 49 and 50, Kitson County, at $45,000. S. C. Iverson is Secy., State Drainage Bd., St. Paul, Minn.

MAHNOMEN, MINN.—W. D. LOVELL, 1415 Eighth St., S. E., Minneapolis, has secured the contract for constructing water tank, tower and complete water system for fire protection, at $4,300. Noted on Sept. 26.

MARION, KAN.—Bids are asked until Oct. 22 by Thos. W. Bown, City Clk., for constructing water-works. Separate bids to be submitted on the following: Furnishing c.-i. pipe and special castings; furnishing hydrants and valves; furnishing and installing machinery, laying pipe, constructing well, power-house, power foundations, etc. Burns & McDonnell, Engrs., 821 Scarritt Bldg., Kansas City, Mo.

EXETER, NEB.—The NATIONAL CONSTRUCTION CO., of South Bend, Ind., has secured the contract for constructing an air-pressure system of water-works, at $14,-800.

BEAVER CITY, NEB.—Bids are asked by the City Council until 8 p. m., Oct. 22, for the construction of a system of air-pressure water-works. W. L. Leonard is City Clk.

HOUSTON, TEX.—We are officially advised that the Weber-Duller Construction Co., Houston, Tex., have been engaged as consulting engineers on the installation of new machinery and changes in plants for the Neches Canal Co., at Beaumont, Tex. About $100,000 will be spent on new installations. W. M. Carrol, Beaumont, is Pres. and Mgr., Neches Canal Co.; Hollis P. Porter is Engr.-in-Charge of the work.

THOMAS, OKLA.—The O'Neil Engineering Co., Wilson Bldg., Dallas, Tex., will install a water-works system for this city.

CORTEZ, COLO.—We are officially advised that the preliminary filings have just been made on an extensive irrigation project called the Southwestern irrigation system. It is planned to erect storage reservoirs in the Dolores River and by an extensive system of canal furnish water to irrigate 250,000 acres of land situated in Montezuma County, Colo., and San Juan County, Utah. The estimated cost is $3,500,000. The engineering work will be great. The parties filing are O. F. Boyle, of Durango, Colo.; L. M. Sutton, Colorado Springs, Colo.; G. W. Melville, Vallecito, Colo., and I. B. Melville, Symes Bldg., Denver, Colo. J. H. Eby, Durango, Colo., is Engr.

SEATTLE, WASH.—Bids were received as follows on Oct. 5, by the Board of Public Works for constructing North and West 80th St. water mains: George A. Webster Co., City, $21,822; Smith & Hall, Down's Block, City, $21,491; INTERNATIONAL CONT. CO., New York [illegible], Seattle, (awarded contract), $15,758.

MADERA, CAL.—We are officially advised that resolutions have been passed by the town to build awater-works system. Estimated cost, $80,000. T. E. Smith is Town Engr.

OAKLAND, CAL.—The plans and specifications for the proposed salt-water auxiliary fire protection system for the [illegible] adopted recently. Estimated cost, $130,000. F. C. Turner is City Engr.

OCEANSIDE, CAL.—Bids are asked until 7 p. m., Nov. 5, by the Board of Trustees for one horizontal return tubular 48-in. diameter and 16 ft. long, and one cross-compound, high-duty pumping engine of 1,000 gals. capacity. Brodie is City Clk.

SALT LAKE CITY, U[illegible]—Bids are asked until 8 p. m., Oct. 18, by the Board of Public Works for furnishing and installing pump and motor, construct[illegible] and outlet pipe for interception-house. F. J. Leonard is Chn. Bd. Pub. Works; Louis C. Kelsey is City Engr.

COEUR D'ALENE, IDAHO—Construction of a gravity system of water-works is contemplated. Dr. C. L. Craig and other citizens are interested. Estimated cost, $150,000.

SUDBURY, ONT.—See under Light and Power Plants.

HAINES, ALASKA.—For water system at Fort Wm. H. Seward see under U. S. Possessions and Cuba.

## SEWERAGE.

*(• denotes that this work is advertised in Engineering News.)*

SALEM, MASS.—Bids were received as follows on Oct. 2 by the Sewerage Commissioners, Thomas G. Pinnock, Chn., for constructing Sections 1, 2, 3 and 4 of South Salem trunk sewer with brick, or reinforced concrete masonry, requiring about 9,913 lin. ft. 34, 36, 38, 42 and 48-in. sewer: (A) brick; (B) concrete.

Section One—Thomas F. Welch, West Roxbury, Mass., (A) $25,896; (B) $[illegible]. Falvey & Kelley, (A) $29,104; (B) $[illegible]. Bruno & Pettetti, (A) $29,277; (B) $28,207.

Section Two—T. F. Welch, (A) $19,351; (B) $15,232. Falvey & Kelley, (A) $20,938; (B) $21,114. Bruno & Pettitti, (A) $[illegible]; (B) $24,035. C. E. Trumbull Co., (A) $24,633; (B) $24,118. Coughlan & Sheits Co., (A) $24,757; (B) $22,460.

Section Three—T. F. Welch, (A) $22,134; (B) $17,222. Falvey & Kelley, (A) $14,277; (B) $16,439. Bruno & Pettitti, (A) $22,930; (B) $23,105. C. E. Trumbull Co., (A) $22,281; (B) $19,553. Coughlan & Sheits Co., (A) $22,183; (B) $20,620.

Section Four—T. F. Welch, (A) $14,812; (B) $11,791. Falvey & Kelley, (A) $18,678; (B) $17,265. Bruno & Pettitti, (A) $20,100; (B) $19,225. G. F. Ashton is City Engr.

BEVERLY, MASS.—We are officially advised that A. G. TOMASELLO, of Boston, has secured the contract for constructing about 3,300 ft. of pipe sewer in Beverly on Cabot and Colon Sts., Water-Works Road and Herrick St., at $20,561, and for constructing 412 ft. of pipe sewer in Wellman St., at $2,760. M. GRADY & SON, of Beverly, has been awarded contract for constructing 350 ft. of pipe sewer in Essex St., Beverly, at $2,002. H. L. Whitney is City Engr.

•TORRINGTON, CONN.—Bids are asked until 2 p. m., Oct. 21, by the Board of Warden and Burgesses, for the construction of sanitary sewers, including the following: 45 ft. 12-in. tile pipe; 1,145 ft. 10-in. tile pipe; 6,581 ft. 8-in. tile pipe; 37 manholes. Hugh W. Cronin, Boro. Clk.; W. A. Williston, Boro. Engr.

•AUBURN, N. Y.—Bids are asked by Hon. E. C. Aiken, Mayor, until 8 p. m., Dec. 3, for the construction, first, of sewers and appurtenances thereto; second, for the construction of a disposal works for sewer system. The sewers to consist approximately of the following: 14,700 ft. of 8-in.; 11,300 ft. of 10-in.; 6,000 ft. of 12-in.; 3,600 ft. of 15-in.; 300 ft. of 18-in.; 1,250 ft. of 20-in. Excavation varies in depth from 5 to 18 ft. There will be approximately 16,000 cu. yds. of excavation, a part of the same being in solid rock. There will be about 17,000 ft. of 5-in. vitrified tile for house sewer connections to be laid from the main sewer to the curb line. There will also be laid in the main trench and underneath the main sewer, as ground water demands, subsoil drains about as follows: 20,000 ft. of 4-in.; 600 ft. of 6-in.; 7,000 ft. of 8-in.; 2,000 ft. of 10-in.; 200 ft. of 12-in. All of the subsoil drain tile to be vitrified tile known as seconds; 84 manholes with an average depth of 9 ft.; twelve flush-tanks; twelve lamp holes. The disposal works consist of reinforced concrete, septic tanks and contact beds, and automatic appliances for dosing them. J. S. Hanlon, City Clk.

ROME, N. Y.—We are officially advised that no bids were received on Oct. 7 by James A. Douglas, Pres. Bd. of Mgrs., Rome Custodial Asylum, for a sewage disposal plant at the asylum.

ALBANY, N. Y.—Bids are asked until Oct. 21, by the Board of Public Works for laying a vitrified pipe sewer and appurtenances in Bonheim St., between Broadway and North Pearl St. Walter Mellus is City Engr.; Isidore Wachsean is Clk. Bd. Pub. Serv.

•WHITE PLAINS, N. Y.—Bids are asked until 1.30 p. m., Nov. 7, by the Chairman of the Bronx Valley Sewer Commission, Grand St., White Plains, N. Y., for the construction of seven sections, comprising about 12 miles of circular sewer from 3 1-3 ft. to 6 ft. in diameter, and about three miles of circular lined tunnel mostly 6½ ft. and 8½ ft. in diameter, the material to be either monolithic reinforced concrete, reinforced concrete blocks or brick masonry. Frank K. Glover is Secy., Bronx Valley Sewer Comm.

KINGSTON, N. Y.—Bids are asked until 7.30 p. m., Oct. 18, by the Common Council, for the construction of sanitary sewers in a portion of Emerson St., between Janet St. and Main St., and in Dederick St. John T. Cummings is City Clk.

ROCHESTER, N. Y.—H. N. COWLES, 6 Gorsline St., Rochester, N. Y., has been awarded the contract for the sanitary and storm water sewer system, at $85,430.

ELKINS, W. VA.—The contract for the construction of the 12-in. sewer in Kerens Ave., Second Addition to Elkins, has been awarded to R. B. CHILLINGER, at 73 cts. a ft.

TIFTON, GA.—Bonds for $15,000 have been voted by the city for the construction of a sewer system.

COVINGTON, GA.—Plans and specifications for sewer and water systems have been prepared by J. B. McCrary, Atlanta, for which $50,000 of bonds may be issued.

PENSACOLA, FLA.—Bids are asked until 3 p. m., Nov. 11, by James Knox Taylor, Supervising Arch., Treasury Dept., Washington, D. C., for plumbing and sewerage at Santa Rosa Quarantine Station, Pensacola.

JASPER, ALA.—Bids are asked until 8 p. m., Oct. 21, by the City Council, for the construction of sanitary sewers.

ENSLEY, ALA.—C. M. BURKHALTER & CO. has been awarded the contract by the City Council for the construction of storm sewers, at $5,500. A. L. Arnold is City Clk.

COVINGTON, LA.—A committee consisting of J. S. Jones, Maurice Plaunche and E. T. Preston, has been appointed to consider the installation of a sewer system.

NEWPORT, TENN.—Bonds for $50,000 have been voted by the city for the construction of sewers and other improvements.

BRISTOL, TENN.—A committee composed of N. M. Lawrence, N. B. Grantham and E. H. Brooks has been appointed by the Town Commissioners to ascertain the cost of installing a sewerage system.

PORTSMOUTH, OHIO.—Bids are asked until noon, Oct. 23, by the Board of Public Service, for the construction of a storm sewer on Tenth St., between Chillicothe and Washington Sts., requiring 575 ft. 18 D. S. vitrified pipe sewer; 20 lin. ft. 15 D. S. vitrified pipe street corner connection; 345 cu. yds. excavation; four manholes and casting, complete. Charles F. Schirrmann is Clk., Bd. Pub. Ser.

MINGO, OHIO.—The following bids were opened Oct. 4, by the City Council, for the construction of a sewer system for Mingo Junction: Daniel Boyle, brick, $39,884; Ferry & Neville, concrete, $42,400; brick and concrete $57,600; Coyne & O'Brien, brick, $48,80?; Floto Bros., brick, $47,952; concrete, $37,688; brick and concrete, $42,584; Castner Bros., brick, $47,000; Rosser & Maloney, over $60,000.

ZANESVILLE, OHIO.—Bids are asked until noon, Oct. 18, by the Board of Public Service for the construction of a 24-in. and 18-in. storm water sewer of sewer pipe in Licking Sewer District. E. H. Smith is City Engr.

YOUNGSTOWN, OHIO.—The Board of Public Service has authorized the building of a storm sewer in West Federal St. F. M. Lillie is City Engr.

CLEVELAND, OHIO.—Bids are asked until noon, Oct. 24, by the Board of Public Service, for the construction of several sewers. W. J. Carter is City Engr.

TOLEDO, OHIO.—Bids are asked until noon, Oct. 24, by the Board of Public Service, for the construction of sewers in various streets. Frank S. Consaul is Ch. Engr., Bd. Pub. Serv.

LINTON, IND.—FRED C. MORGEN and T. E. SLINKARD, Linton, have been awarded the contract by the City Council for the construction of a sewerage system, at about $64,000. Frank Spelbring is City Clk.

ELKHART, IND.—Plans have been ordered for the construction of a sewer in West Franklin St. and a sewer in Hudson St. E. L. Arnold is Chn. Bd. Pub. Wks.

BRAZIL, IND.—Plans and specifications are being prepared for a complete sewer system. Bids probably will soon be asked. G. A. Fletcher is City Engr.

INDIANAPOLIS, IND.—Bids probably will soon be asked by the Board of Public Works for the construction of a sewer system in North Indianapolis. Plans and specifications have been ordered. Blaine H. Miller is City Engr.

GRAND RAPIDS, MICH.—No bids have been received for building the East Bridge St. sewer.

DETROIT, MICH.—W. W. Magee, Secy. Board of Public Works, has stated that JAMES HANLEY, 40 Fort St., has been awarded the contract for the Shroeder Ave. sewer, at $17,693 for Sec. 4 and $25,021 for Sec. 5. LANGLEY & JEYNES have been awarded the contract for the construction of the Lothrop Ave. sewer, at $10,074. Robert H. McCormick is City Engr.

READING, ILL.—M. G. ROTH has been awarded the contract by the Village Council for the construction of a sewer in and the improvement of Vine St., at $9,837.

NORTH CHICAGO, ILL.—The Bureau of Navigation, Navy Dept., Washington, D. C., has awarded to H. D. HALLETT, Aurora, Ill., contract for constructing the sewers and drains at the naval training station, Great Lakes, North Chicago, Ill., at $55,390.

EAST ST. LOUIS, ILL.—Bids are asked until noon, Oct. 21, by the Board of Local Improvements, for sewering, filling, grading, curbing and guttering Illinois Ave. from the southerly line of State St. to the westerly line of 13th St., and providing for catch-basins and manholes and pipe connections with sewers. E. J. Eggman is Clk. Bd. Local Improvements.

ADEL, IOWA.—Bids are asked until Oct. 21 by the Town Council at the office of V. G. Sweeley, Town Clk., for constructing 8 and 10-in. vitrified clay pipe sewers in Walnut, Main and Rapids Sts., in all about 4,460 lin. ft.

VIRGINIA, MINN.—Bids are asked until Oct. 22 by Albert E. Bickford, City Clk., for constructing sewers in Sewer Dist. No. 3 G.

ST. PAUL, MINN.—The contract for the construction of the Goff Ave. sewer from George to Page Sts. has been awarded by the Board of Public Works to O'NEIL & PRESTON, at $5,357. L. E. Rundlett is City Engr.

ST. PAUL, MINN.—Bids are asked until 2 p. m., Oct. 21, by the Board of Public Works, for the construction of a sewer along the west line of the right-of-way of the Minneapolis, St. Paul & Sault Saint Marie Ry., from York St. to Magnolia St., and on Case St. R. L. Gorman, Clk., Bd. Pub. Wks.

FALLS CITY, NEB.—We are officially advised by M. N. Bair, Designing Engr., that a 6,000-ft. 12-in. sewer will soon be built. Estimated cost, $5,000.

BOZEMAN, MONT.—E. T. RICH secured the contract for constructing sewers on Sent. 24, at $25,000. C. M. Thorpe is City Engr.

ST. JOSEPH, MO.—The HARTMAN BRIDGE & CONSTRUCTION CO. has been awarded the contract by the Board of Public Works for the construction of a sewer in St. Joseph Ave. and Parker St., at $3,200. David L. Lawlor is City Engr.

SHERMAN, TEX.—Bids are asked until 7.30 p. m., Oct. 21, by Henry Zimmerman, Secy. City Council, for the construction of a line of sewers about a mile in length.

ENID, OKLA.—Bonds for $185,000 have been voted by the city for a sanitary sewer system.

SEATTLE, WASH.—Plans and specifications are being prepared by R. H. Thomson, City Engr., for the relief of the tide-flat sewer situation. The Lander St. trunk sewer will extend the south tunnel sewer from Tenth Ave. south to the east waterway, where it will discharge in deep water. The extension will be more than a mile long and will take care of the sewage of the district as far south as the canal waterway, as far north as Holgate St., and as far east as 14th Ave. and Beacon Ave. The Connecticut St. trunk sewer will be built out as far as the outer harbor line. It will furnish an outlet for all of the sewage of the district bounded by Broadway, Marion St., Twelfth Ave., south, and Beacon Hill. It will be 5½ ft. in diameter. Of the smaller projects the most pressing is the building of the King St. outfall sewer. The present King St. sewer discharges near the Pacific Coast Company's dock. An extension of 150 ft. is to be built to carry this sewage north into deeper water. Estimated cost, $275,000.

SEATTLE, WASH.—Bids were received as follows by the Board of Public Works, on Oct. 5, for building Hiawatha Place sewers: Smith & Hall, Down's Block, City, $7,756; DICKEN & RIGHTMIRE, Seattle, (awarded contract), $7,334. No bids were received for constructing 39th St. sewers.

LOS ANGELES, CAL.—C. UKROPINA has been awarded the contract for the construction of a sewer on Bloom St., 9,074 ft. in length, at $11,530. H. G. Parker is City Engr.

BISBEE, ARIZ.—We are officially advised that GUY HYDE CHICK and EDWIN D. WHITE, of Berkeley, have secured contract, at $77,723, for constructing sewer system at Bisbee. Other bids were: McQuatters Plumbing & Machine Co., Hillsboro, Tex., $79,254; F. J. Gehring, East Las Vegas, N. Mex., $85,375. C. W. Hicks is City Clerk.

VICTORIA, B. C.—The Streets, Bridges and Sewers Commission have approved the plan for the installation of a sewage system for a large section of Victoria, west. Estimated cost, $4,000.

## STREETS AND ROADS.

*(* denotes that this work is advertised in Engineering News.)*

KINGMAN, ME.—A road three miles long probably will be built between Sprague's Mills and the road from Kingman Station to Grant's Mills. The road will be about three miles long, four-fifths of the distance being in the town of Kingman. Estimated cost, $6,000.

BOSTON, MASS.—JONES & MEEHAN, 10 Tremont St., have been awarded the contract by William Jackson, City Engr., for paving and regulating Northern Ave. and Sleeper St., at $14,714. The contract calls for 785 lin. ft. of edge stone at $1.05 per ft.; 6,500 yds. of granite blocks at $2 per yd.; 670 yds. of brick sidewalk at $1 per yd., and 50 yds.. of flagging at $4.40 per yd.

HARTFORD, CONN.—The Board of Contract and Supply has awarded the contract for repaving Asylum St., from Main to Spruce St., to the SOUTHERN NEW ENGLAND PAVING CO., of Hartford, at $2.08 a sq. yd. for laying the pavement and keeping it in repair for five years, $2.28 a sq. yd. to keep it in repair for ten years, and $6.90 per cu. yd. for all extra concrete that may be wanted. Frederich L. Ford is City Engr.

NORWICH, CONN.—The following towns have appropriated $20,000 each for highway improvements: Franklin, Norwich, Fitchville, Stafford Springs, Ledyard, Sprague, Barkhamsted, Bristol, Derby, Rocky Hill, Lyme, New Milford, Portland, Salisbury, Stratford and Washington.

NEW YORK, N. Y.—Bids are asked until 2 p. m., Oct. 21, by Henry S. Thompson, Acting Pres. Boro. of Manhattan, and Comr. of Public Works, for regulating and repaving various streets in Manhattan.

Bids are asked until 3 p. m., Oct. 24, by the Park Board, Arsenal Bldg., Fifth Ave. and 64th St., for furnishing and delivering 1,000 cu. yds. broken stone of trap rock, and 5,000 cu. yds. of screenings trap rock for Parks, Boro. of the Bronx.

NEW YORK, N. Y.—Bids were received as follows on Oct. 8, by President Boro. of Richmond, for regulating, grading and paving with macadam pavement the roadway of Woolley Ave., from Indiana Ave. to Watchogue Road, etc.: Quinroy Construction Co., $50,630; Jacob E. Conklin, $49,607; Joseph Johnson Sons & Co., $53,003.

MT. MORRIS, N. Y.—McCARTHY & SIMERSON, the only bidders, have been awarded the contract for macadamizing Main St., from Erie St. to Buck Run bridge, at $3,625.

STAPLETON (S. I.), N. Y.—Bids were received as follows at the office of the Supervising Architect of the Treasury, Washington, D. C., for improving the fences, roadways and walks at the Marine Hospital, Stapleton, N. Y.: Joseph Johnson & Sons, West New Brighton, N. Y., $13,400, 80 days; Neptune B. Smythe, New York City, $11,886, 100 days; W. H. C. Russell, New Brighton, N. Y., $18,000, 100 days; W. F. Holding, Davidson Ave. and 185th St., New York, $11,500, 95 days; Abbott-Gamble Co., 32 Broadway, New York, $14,000, 60 days.

ALBANY, N. Y.—Bids are asked by the Board of Contract and Supply, Albany, N. Y., until 3 p. m., Oct. 21, for the improvement of Sherman St., from the east line of Northern Boulevard to west line of Lark St., the work including grading, curbing and paving the carriageway with vitrified fire clay paving blocks, repairing and laying sidewalks with flags and vitrified bricks, and building receiving basins; also for the improvement of Robin St., from Madison Ave. to Yates St., the work including grading, curbing and paving the carriageway with granite blocks, repairing and laying sidewalks with flags and vitrified bricks and sod, building receiving basins, etc. Walter Melius is City Engr.

PHILADELPHIA, PA.—Bids are asked until noon, Oct. 21, by the Board of Public Works for repaving various streets with asphalt, brick or granite blocks.

BALTIMORE, MD.—PATRICK FLANIGAN & SON, Lexington and Calvert Sts., have been awarded the contract by the County Commissioners for repairing Belvidere Ave., from Park Heights Ave. to the Reisterstown road. Benjamin T. Fendall is City Engr.

WASHINGTON, D. C.—COLBURN BROS., Colorado Bldg., have been awarded the contract for laying cement sidewalks in the District for 1907-1908, at $1.05 a sq. yd. for city work, and $1.18 a sq. yd. for suburban work.

DURHAM, N. C.—We are officially advised that none of the bids for the 11½ miles of macadam road in Durham County, N. C., advertised in Engineering News, to be let on Oct. 1, were accepted, all of them being too high. Additional bids will be asked for. Gilbert C. White is City Engr.

NEWBERN, N. C.—Bonds for $50,000 for paving streets with concrete and curbing same with granite have been voted by the city. C. J. McCarthy is Chn. St. Com.

TOCCOA, GA.—Bids are asked by B. P. Brown, Jr., Ordinary Stephens County, Toccoa, Ga., Oct. 24, for building reinforced concrete walls, concrete walks, grading and terracing plats around and through Courthouse Sq., furnishing all materials and labor for completion of work. The retaining wall on south side is to be 400 ft. long, east end 225 ft. long, and west end 225 ft. long, to be built of reinforced concrete, steel reinforcing to be approved by Ordinary. Eight sets of steps will be built of concrete: walks, 5 ft., 6 ft. and 8 ft. wide, respectively, will be constructed.

ATLANTA, GA.—The Fulton County Commissioners have decided to have Peachtree St. paved with asphalt. Estimated cost, $30,000.

*PENSACOLA, FLA.—Bids are asked until noon, Nov. 15, by the Board of Bond Trustees, for 107,700 sq. yds. of clay or shale blocks, sheet asphalt, bitulithic, wood block, or macadam pavement, and 115,950 lin. ft. of concrete curb. L. Hilton Green is Chn. Bd. Bond Trustees. T. Chalkley Hatton is Ch. Engr.

TROY, OHIO.—Bids are asked until noon, Oct. 19, by Board Public Service for paving West Main St., from Plum St. to the Miami and Erie Canal bridge, approximately 7,000 sq. yds. L. A. Ziegenfelder is Clk. Bd.

CINCINNATI, OHIO.—Bids are asked until noon, Nov. 1, by Board County Commissioners for improving Hamilton Pike, from the north corporation line of Mt. Healthy to the Butler County line, Springfield Township. Fred Dreihs, Clk. Bd.

GREENCASTLE, IND.—Bids are asked until Nov. 2, by the Commissioners of Putnam County for the construction of 16,340 ft. of gravel roads in Russel Township, and for the improvement of 10,566 ft. of macadamized road in Monroe Township. C. C. Hunt is County Audr.

FORT WAYNE, IND.—Bids are asked until 10 a. m., Nov. 2, by Commissioners of Allen County, for the construction of 16,340 ft. of macadamized road in Madison Township. George W. Lindemuth is County Audr.

HARTFORD CITY, IND.—The County Commissioners have awarded the contract for the construction of Joseph Creek roads, Nos. 1 and 2, to MARION CREEK, at $10,950 and $11,417. CHARLES CLAMME was awarded the contract for the construction of the L. H. McGeath road, at $6,833.

VINCENNES, IND.—Bids are asked until 2 p. m., Nov. 5, by the Commissioners of Knox County for the construction of 104,602 ft. of gravel roads in Deeker Township and 10,268 ft. of gravel roads in Vincennes Township. John T. Scott is County Audr.

DECATUR, IND.—Bids are asked until 10 a. m., Nov. 4 by the Commissioners of Adams County for the construction of a macadamized road in Root Township and also in Kirklin Township. C. D. Lewton is County Audr.

CRAWFORDSVILLE, IND.—Bids are asked until 10 a. m., Nov. 5, by the Commissioners of Montgomery County for the construction and improvement of a gravel road in Union Township. B. F. Carmin is County Audr.

LOGANSPORT, IND.—Bids are asked until Nov. 4 by the Commissioners of Cass County for the construction of two gravel roads in Bethlehem Township, one and three-quarters and two and one-quarter miles in length, and a gravel road in Jackson Township and also in Clinton Township. George W. Cann is County Audr.

QUINCY, ILL.—Bids are asked until Oct. 19 by the Board Local Improvements for paving Tenth St., between Sycamore and Locust Sts. Estimated quantities, 3,891 sq. yds. of brick paving and 1,652 ft. of sandstone curbing. Cost, $6,752. F. L. Hancock is City Engr.

PEORIA, ILL.—JOHN McALEISTER has been awarded the contract by the Board Local Improvements for paving Jackson St., between Pennsylvania Ave. and Glen Oak Ave., at $6,011.

ST. LOUIS, MO.—Bids are asked until noon, Oct. 29, by the Board of Local Improvements, for the improvement and construction of various streets. W. B. Dryden is Secy. Bd. Local Improvements. A. J. O'Reilly is Pres.

ARGENTA, ARK.—Bids are asked until 11 a. m., Oct. 31, by the Constructing Quartermaster for constructing extension to sidewalks at Fort Logan H. Roots, Ark.

BOWIE, TEX.—Bonds for $15,000 will be issued by the city for street improvements.

TACOMA, WASH.—The city is planning an extensive boulevard system, about 40 miles of drives being included in the proposed improvements. Estimated cost, $2,000,000. Frank L. Davis is City Engr.

SPOKANE WASH.—THE INDEPENDENT PAVING CO. has been awarded the contract by the Board Public Works for paving Ninth Ave., from Monroe St. to Walnut St., with asphalt, at $15,800. The estimate of Charles McIntyre, City Engr., was $18,823.

SEATTLE WASH.—The following bids were received by the Board of Public Works on Oct. 5: Westlake Ave., Denny Way to Mercer St., planking—H. W. Hawley, 2902 Western Ave., $11,407; HOLT & JEFFERY, 313 Third Ave. North (awarded contract), $10,352; Rydstom & Goerig, 1802 16th Ave., $11,280; L. H. Goerig, 312 25th Ave. South, $10,983. Irving St., concrete walks—E. H. RAWLE & CO., 400 Arcade Annex (awarded contract), $5,976; Smith & Hall, Down's Block, $6,162. Fuhrman Ave., grading—S. Normile, 608 Kinnear Place, $54,161; INTERNATIONAL CONT. CO., New York Block (awarded contract), $41,465. Sixth Ave. Northeast, concrete walks—SMITH & HALL, Down's Block (awarded contract), $10,806; Andrew Peterson, 410 Washington Bldg., $11,212. Union St., paving—H. F. Jahn & Co., 571 Colman Block, $25,495; SPARGER CONCRETE CO., 562 Colman Blk. (awarded contract), $25,451; Barber Asphalt Paving Co., Bailey Bldg., $24,964; Independent Asphalt Paving Co., Pioneer Block, $24,643.

REDDING, CAL.—Bids are asked until 10 a. m., Nov. 7, by the Board of Supervisors for clearing and constructing a wagon road commencing at a point on the present Millville and Shingleton road to the south half of the S. E. Quarter of Sec. 27, a distance of about 2.04 miles. S. N. Witherow is Clk. Bd. Supervisors.

LOS ANGELES, CAL.—The contract for work on Jefferson St., from Main to Key West St., has been awarded by the Board Public Works to the WESTERN PAVING CO. at the following prices: Curb, 33 cts.; gutter, 35 cts.; sidewalk, 14 cts.; paving, 22½ cts.; culverts, $14. H. B. Ferris is Secy. Bd. Pub. Works.

WINNIPEG, MAN.—H. N. Ruttan, City Engr., has recommended the construction of macadam pavements along Wellington Crescent at a cost of $124,500.

## MANUFACTURING PLANTS.

*(* denotes that this work is advertised in Engineering News.)*

EASTPORT, ME.—The Sea Coast Canning Co. will begin erection of a canning plant at once. This plant will replace that destroyed by fire in April. The company is capitalized at $2,000,000. Francis H. Leggett is Pres.

BOSTON, MASS.—The L. P. SOULE & SON CO., 166 Devonshire St., has the general contract for erection of a factory building for the Lovejoy Wharf Trustees. Cost, $400,000. WOODBURY & LEIGHTON CO., 166 Devonshire St., has the foundation contract.

*SEWAREN, N. J.—Notice is given by J. H. Thayer Martin, Receiver, Prudential Bldg., Newark, that at 2 p. m., Oct. 23, he will sell at public auction on the premises, at Sewaren, N. J., the plant of Silica Block & Brick Mfg. Co., consisting of a frame building, with tables, patterns, steaming and drying ovens, boiler and piping, pumps and other implements and materials for making cement blocks.

MONONGAHELA, PA. — The American Window Glass Co., Farmers' Bank Bldg., Pittsburg, will double the capacity of its plant here, it is stated. Cost, $170,000.

PHILADELPHIA, PA.—Sauer & Hahn have been commissioned to prepare plans for erection of a $100,000 cotton spinning and hosiery mill for the Standard Hosiery Co., at 1320-1326 North Lawrence St. The plant will include a 5-story spinning mill, measuring 50 ft. on Lawrence St. and 150 ft. deep; an engine and boiler-house, 36 × 96 ft.; a picker-house, 36 × 44 ft.; a dye and bleach-house, 18 × 98 ft., and a reinforced-concrete reservoir. The buildings will be of reinforced concrete and slow-burning construction, with walls of brick. The work will include the erection of a 5-story addition to

the present hosiery mill, measuring 18 x 98 ft. Estimates for the work will be invited soon.

ALTOONA, PA.—Plans have been prepared, it is stated, and bids are being received by Victor Beutner, Westinghouse Bldg., Pittsburg, Pa., for a cement plant, to be built at Altoona, by the Altoona Portland Cement Co., to cost about $800,000. It will have a daily capacity of 2,000 bbls; 2,500-HP. gas engines will be used to furnish the power. Plant will be completed and ready for operation about June 1.

YORK, PA.—The STANDARD PAVING & CONSTRUCTION CO. has been awarded the contract for concrete work in the new plant of the York Felt & Paper Co. The contract includes building concrete walls and floors for all of the buildings. The walls will be 3 ft. wide at the base. Some of the walls will be 18 ft. high. Work on contract will be commenced at once. The concreting will be completed in five weeks.

BALTIMORE, MD.—Baillinger & Perrot, Archs., 1200 Chestnut St., Philadelphia, Pa., will prepare plans for an addition to a label factory at Milton Ave. and Lanvale St., Baltimore, for the Simpson Doeller Co. Cost, $150,000.

Charles H. Birmingham & Co., brass founders, 231 South Exeter St., it is reported, have purchased about six acres of land on Washington Road at junction of Baltimore & Ohio and Pennsylvania railroads, and will establish brass foundry, wire mill, rolling mill and metal-testing plant.

WASHINGTON, D. C.—Washington Market Co., Edward R. Tinker, Pres., and Frank G. Wilkins, Secy., Center Market, Seventh St. and Pennsylvania Ave., N. W., will hold meeting of stockholders on Oct. 21 to decide the question of authorizing issue of $300,000 bonds to provide for erection of buildings and purchase of machinery for manufacture of ice and for cold-storage plant. Structure will be three stories high, 150 x 300 ft., and will be erected in block bounded by Eleventh, Twelfth and F Sts., S. W.

NORFOLK, VA.—Frank Hitch is preparing to rebuild lumber mills recently destroyed by fire. The site is being cleared and machinery will be ordered at once.

The Norfolk Iron Mfg. Co. will begin erection of proposed iron works on Eastern branch of Elizabeth River soon. Building will be constructed of steel sheeting. Railroad facilities have been provided, and machinery is now being received. M. H. Logue is Pres.; George W. Dusch, Vice-Pres. and Secy.; Walter F. Flynn, Treas.; W. D. Murray, Gen. Mgr., and W. J. Storey, Consult. Engr.

BELMONT, N. C.—The Monarch Mfg. Co. proposes to erect a cotton mill of 10,000 spindles, with a capital stock of $125,000. A. C. Lineberger is Pres.; S. P. Stowe, Secy.

TAYLORSVILLE, N. C.—The management of the Taylorsville Cotton Mills has awarded contract to JOHN W. CAMPBELL for erection of mill building, 77 x 278 ft., boiler and engine-house, 25 x 41 ft., and warehouse 50 x 100 ft. W. B. Matheson is Pres., and capital stock is $100,000.

GREELYVILLE, S. C.—T. W. Boyle and associates will build a $150,000 cotton mill at Greelyville. J. E. Tierrine, of Greeneville, is Arch. and Engr.-in-Charge. The plant will be equipped with 10,000 spindles and a complement of looms.

MACON, GA.—The Crescent Steam Laundry will establish laundry, it is stated. Three buildings are to be erected, main building 67 x 135 ft.; basement of concrete; first story brick; boiler-room 34 ft. square; stable 72 x 42 ft. Frank R. Happ, Exchange Bank Bldg., Macon, is Arch.; E. Elkan is Proprietor.

COLUMBUS, GA.—The Rural Automatic Mail Box Co., recently incorporated with $75,000 capital stock to deal in and manufacture automatic mail boxes, will erect and equip buildings at cost of about $25,000, it is reported. Plans for building are not complete. The company will produce mail boxes, devices and attachments. A. C. Chancellor and H. M. Thomas are interested.

HATTIESBURG, MISS.—The Directors of the Komp Machine Works have awarded contract to T. P. CRYMES for erection of building, 90 x 90 ft.; three stories, of brick, pressed brick and stone; slow-burning standard mill construction. Cost, $19,035. R. E. Lee is Arch.

WINNFIELD, LA.—The Chicago, Rock Island & Pacific Ry. Co. is arranging for improvements at Winnfield, including erection of 12 or 15-stall round-house, car repair plants, additional trackage, etc., for which about $300,000 will be expended. J. B. Berry, Chicago, Ill., is Ch. Engr.

NASHVILLE, TENN.—The Robinson-McGill Carriage Co. will establish plant at 207 Broadway, Nashville, for the manufacture of medium to high-grade carriages; capacity, 5,000 a year. Brick building will be erected, two stories and basement, 150 x 60 ft.; also two wings, 60 x 50 ft., two stories each. Cost, $25,000. T. M. Robinson is Pres. and Gen. Mgr.; F. H. Logan is Arch.

LOUISVILLE, KY.—Clarke & Loomis, Archs., 502 Fourth St., have prepared plans for a bakery for the Whitesides Baking Co., to be erected at a cost of $60,000.

URBANA, OHIO.—Robert Gotwald, Arch., Gotwald Bldg., Springfield, Ohio, has prepared plans for a 2-story factory building, 70 x 260 ft., for the American Automatic Telephone Co., Urbana. Cost, $35,000.

TOLEDO, OHIO.—Walter C. Hudson, 717 The Nasby, has prepared plans for a 1-story factory building for the Ohio Wheelbarrow Co., to cost $30,000.

CINCINNATI, OHIO.—The Cincinnati Iron & Steel Co., it is stated, will erect a rolling mill having a capacity of 3,000 tons a month, and to cost $500,000. Edward H. Bush is Pres.

ANDERSON, IND.—George A. Brakeman, Pres. of the Cooperative Glass Co., will soon ask for bids for the remodeling and installing a glass factory in this city.

HAMMOND, IND.—The Steel Car Forge Co. has been admitted to do business in Indiana. The company will establish a plant in Hammond. W. D. Webb is interested.

LA FAYETTE, IND.—The Kern Packing Co., Lafayette, is preparing to make improvements in its plant and has recently issued bonds to the amount of $100,000, a large portion of the proceeds to be used for enlarging the plant.

CANNELTON, IND.—The J. F. Boeppel Pearl Button Co. will ask for bids soon for erection and equipment of a factory to make buttons.

INDIANAPOLIS, IND.—Bids are asked until Oct. 20, by Bedell & Lieske, Archs., for constructing a planing mill, etc., for the Dynes Lumber Co. Estimated cost, $25,000.

INDIANAPOLIS, IND.—Herbert L. Bass & Co., Archs., Commercial Club Bldg., have let general contract to the MANSFIELD ENGINEERING CO., Traction Terminal Bldg., for a 2-story factory building, for Allison & Fisher. Cost, $35,000.

EVANSVILLE, IND.—The American Lamp Glass Co. will build plant on the site of one recently destroyed by fire, at a loss of $100,000.

DETROIT, MICH.—The Solvay Process Co., William B. Cogswell, Gen. Mgr., has had plans made for four buildings, to cost $139,000.

GRAND RAPIDS, MICH.—Frank P. Allen & Son, Archs., Michigan Trust Bldg., have let the contract for a factory for the Michigan Wheel Co. to C. F. CAMP. Estimated cost, $10,000. The building will be 40 x 140 ft., and brick veneer.

CHICAGO HEIGHTS, ILL.—SCHNEIBLE BROS., 122 Monroe St., Chicago, have been awarded the general contract to erect a brewery at Chicago Heights, for the Chicago Heights Brewing Co., Henry Padenius, Pres. Buildings are to be of brick, steel and concrete construction, and will cost $115,000.

MILWAUKEE, WIS.—A. F. Gallum & Sons will erect a 4-story tannery on North Water St., at a cost of $80,000.

ASHLAND, WIS.—The Ashland Brewing Co. has decided to build a plant, it is stated, at a cost of about $120,000. Plans are being completed.

SHEBOYGAN, WIS.—The American Chair Mfg. Co. will rebuild its factory, which was recently burned. Estimated cost, $40,000.

DAVENPORT, IOWA.—Hanssen & Harfst, Archs., Schmidt Bldg., have let general contract to the TRI-CITY CONSTRUCTION CO., Masonic Temple, Davenport, for a 1-story addition to foundry for Davenport Locomotive Works. Cost, $25,000.

RED WING, MINN.—Mrs. Edna Dickerson Kruse will erect a 3-story brick type foundry at 419-423 Fourth St., South, it is reported, to be occupied by the American Type Foundry. Estimated cost, $45,000.

ST. PAUL, MINN.—The Sharood Shoe Co., Fourth St. and Broadway, will erect a 6-story pressed-brick and cut-stone, reinforced-concrete, fireproof shoe factory in the Midway district here. Work will be commenced early in the spring. Cost, $250,000. C. K. Sharood is Pres.

J. W. Stevens, Arch., New York Life Bldg., is preparing plans for a factory to be erected in the Midway district for the manufacturing of woolen suitings, to cost $75,000.

OMAHA, NEB.—Keys Bros. will erect a new 3-story factory and blacksmith shop on the corner of 28th St. and First Ave., to cost $25,000.

YANKTON, S. DAK.—The Schwenk-Barth Brewing Co., Yankton, S. Dak., will build a new brew-house and mill-house soon, at a cost of about $40,000.

PIERRE, S. DAK.—Bids are asked by the Commissioner of Indian Affairs, Department of the Interior, Washington, D. C., until 2 p. m., Nov. 4, for constructing a brick addition to the work-shop, with plumbing, and electric light plant, at the Indian School, Pierre. J. C. Levengood is Supt., Pierre; C. F. Larrabee is Acting Comr. of the Interior, Washington.

GUERNSEY, WYO.—The Consolidated Mining Co., in which W. C. Young and W. M. Kerin, of Denver, Colo., and F. O. Olson, of Pittsburg, Pa., are interested, it is reported, will expend about $700,000 in the erection of a steel mill in Guernsey.

ST. LOUIS, MO.—Pullis Iron & Steel Works, Thomas R. Pullis, Pres., has prepared plans for erection of building, 100 x 300 ft., to be equipped with lathes, riveters, punches, shears, etc.

JOPLIN, MO.—Keller Steam Economizer Co., 304 Bartlett Bldg., will erect a building and install machinery for the manufacture of feed-water heaters, and will expend about $45,000 in installation of entire plant.

KANSAS CITY, MO.—The URBAN CONSTRUCTION CO., Broad and College Sts., Rosedale, has the general contract for a 1 and 3-story oil mill, cooper shop and boiler-house for the American Linseed Co., 24th St. and Broadway, Kansas City. Cost, $30,000.

LITTLE ROCK, ARK.—The Retail Grocers' Ice Co., M. Kirst, Pres., will erect an addition to its plant, increasing daily capacity from 50 to 150 tons. The YORK MANUFACTURING CO., York, Pa., has contract to furnish 100-ton ice machine. Between $50,000 and $60,000 will be expended.

HARRISON, ARK.—A wrapping twine mill is to be established at Harrison. H. E. Cantrell is interested in the enterprise. The product will be 3 or 4-ply wrapping twine, about 2,000 lbs. to be the daily output.

EL DORADO, ARK.—The Chicago, Rock Island & Pacific Ry. Co. is reported to be considering expenditure of about $300,000 for improvements at El Dorado, including erection of 12 or 15-stall round-house, car repair plants, yards, etc. J. B. Berry, Chicago, Ill., is Ch. Engr.

DALLAS, TEX.—The Boedeker Mfg. Co., 213 South Erway St., recently incorporated, will establish a 50-ton ice plant in connection with ice-cream factory, it is reported. It is erecting 2-story building, 60 x 150 ft., and 1-story building, 60 x 50 ft. Cost of buildings, $25,000; cost of machinery, $35,000. F. W. Boedeker is Pres.; G. L. Boedeker, Vice-Pres.; J. A. Smith, Secy.-Treas.; J. S. Jacobs, Engr.

PASCO, WASH.—J. J. Schlotfeldt is planning to erect a brewery here, to cost between $75,000 and $100,000.

SAN FRANCISCO, CAL.—It is announced that within 60 days foundation work will be started at Eighth and Townsend Sts. for a cold-storage and ice-making plant to cost $800,000. The plant will have a daily ice making capacity of 80 tons, and will contain chill rooms for the storage of perishable products. The plant will contain a total storage capacity of 1,249,200 cu. ft. The building will be constructed of concrete and is to be six stories high, with separate building for engines, boilers, ice plant, etc. The machinery will consist of an 80-ton ice plant to be operated by Corliss compound condensing engines, and to be in units so that the compressors can be operated independent of each other. C. F. Paige, with T. G. Walker, will supervise construction of the plant. Evarts I. Blake and W. A. Cavanagh are the financial agents of the corporation.

ST. JOE, IDAHO.—C. B. Pride, Engr., of Appleton, Wis., is preparing plans for a paper and pulp mill, to be erected at St. Joe, at a cost of $1,500,000. The Wood Pulp & Paper Co., Seattle, is interested.

NEW WESTMINSTER, B. C.—The North American Shingle Co., of this city, which is being incorporated, intends erecting a shingle mill in the West End on the north arm of the Fraser River, at a cost of $20,000.

## MISCELLANEOUS CONTRACTS.

*(* denotes that this work is advertised in Engineering News.)*

U. S. RECLAMATION SERVICE.—All news relative to canal projects, etc., will be found under Water Supply—Irrigation.

RUBBER TIRES.—New York, N. Y.—Bids are asked until 10.30 a. m., Oct. 22, by Francis J. Lantry, Fire Comr., for new rubber tires and steel wire.

PIER.—Bayonne, N. J.—F. W. Dalrymple, City Engr., states that no definite plans have been prepared for proposed recreation pier for Bayonne. It would cost $25,000.

BREAKWATER.—Portuguese Cove, N. S.—Bids are asked until Oct. 25 for the construction of a breakwater. Fred. Gelinas, Dept. of Public Works, Ottawa, Ont.

*DREDGING.—Philadelphia, Pa.—Bids are asked until noon, Nov. 15, by Major J. C. Sanford, Corps Engrs., U. S. A., for dredging in Delaware River in Sections 4 and 5.

RETAINING WALL.—Akron, Ohio.—Bids are asked until noon, Oct. 18, by Board Public Service, for construction of retaining wall on Hickory St. Chas. H. Walters, Secy.

NOZZLES, TOOLS, ETC.—New York, N. Y.—Bids are asked until 10.30 a. m., Oct. 22, by F. J. Lantry, Fire Comr., for furnishing and delivering nozzles, tools, etc., for new fire-boat.

WHARF.—Fort Schuyler (Westchester postoffice), N. Y.—Bids are asked until 11 a. m., Nov. 1 by Lieut. Chas. L. Fischer, Q. M., U. S. A., for repairing the quartermaster's wharf.

TENTS.—Washington, D. C.—The Quartermaster, U. S. Marine Corps, Washington, D. C., has awarded to F. R. THORNS, New York, contract for furnishing a quantity of tents at $16,292.

DITCH.—Onawa, Iowa.—The contract for excavating McCandlass ditch, about 280,681 cu. yds., has been awarded to CALLAHAN BROS. & KATZ, Bee Bldg., Omaha, Neb., at 8.69 cts. per cu. yd.

*LEVEE.—Little Rock, Ark.—Bids are asked until 11 a. m., Nov. 16, by Capt. Wm. D. Connor, Corps Engrs., U. S. A., for 248,000 cu. yds. of levee work opposite Pine Bluff, on Arkansas River, Ark.

MASONRY WORK.—Shepherdstown, W. Va.—Wm. R. Williams, Arch., Shepherdstown, writes us that JOHN TUORTO, Jersey City, N. J., has been awarded the contract for masonry work for Dam No. 4.

BULKHEAD.—Stockton, Cal.—R. C. Tumelty, City Engr., states that time has not been set for receiving bids for building concrete bulkhead on north side of Stockton channel. Cost estimated at $9,000.

BREAKWATER.—Ottawa, Ont.—Bids are asked by Fred. Gelinas, Dept. of Public Works, Ottawa, until Oct. 26, for the construction of an extension to the breakwater at Great Salmon River, St. John County.

WHARF REPAIRS.—Saunderstown, R. I.—Bids are asked until Oct. 19 by Capt. Willis C. Metcalf, Q. M., U. S. A., 209 Thames St., Newport, for repairs to quartermaster's wharf and ferry slip at Fort Greble.

*CANAL.—Milner, Idaho.—Paul S. A. Bickel, Ch. Engr., Twin Falls North Side Land & Water Co., Milner, advises us that contract for constructing 16 miles of canal has been let to DONALD GRANT, Faribault, Minn.

WHARF.—Southampton, Ont.—Bids are asked by Fred. Gelinas, Secy. Dept. Pub. Works, Ottawa, until Oct. 25, for the construction of an extension to wharf at Southampton Harbor of Refuge, Bruce County, Ont.

WHARF.—St. Alphonse, Que.—Bids are asked until Oct. 26 by Fred. Gelinas, Secy., Dept. Pub. Wks., Ottawa, Ont., for constructing an extension to the wharf at St. Alphonse. J. C. Tache, Resident Engr., Chicoutimi.

COKE OVENS.—Hamilton, Ohio.—The Hamilton Coke Co. is reported to have let the contract for the erection of several large coke ovens to COKE & GAS CONSTRUCTION CO., of Camden, N. J. Estimated cost, $350,000.

*DRAINAGE.—New Boston, Bids are asked until 2 p. m., Nov. 7, by the Commissioners of the Bay Island Levee District, Mercer County, for corrections of excavation for ditching for levees, as follows:

TRAP ROCK.—New York, N. Y.—Bids are asked until 3 p. m., Oct. 24, by the Department of Parks, for furnishing 1,000 cu. yds. broken stone, delivering and 5,000 cu. yds. screenings, rip rap rock (No. 4, 1907), for parks, Boro. Bronx.

REPAIRING ARCH.—Brooklyn, N. Y.—Bids are asked until 3 p. m., Oct. 24, by the Department of Parks, by the Commissioner, for furnishing all the labor and materials necessary for and make repairs to the arch and Sailors' Arch, Prospect Park, Brooklyn.

BREAKWATER.—Fairport, Ohio.—Lieut.-Col. Mc.D. Townsend, Corps Engrs., U. S. A., Cleveland, states that the contract for extending west breakwater at Fairport harbor (bids opened Sept. 10) has been awarded to SEA COAST CONSTRUCTION CO., 1937 Fifth Ave., New York City, at $

*DREDGING, ETC.—New York, N. Y.—Bids were received as follows on work for Col. John G. D. Knight, Corps Engrs., U. S. A., for dredging and removing rock in Sag-gerties Harbor, N. Y. P. Sanford, 277 Washington St., Jersey City, N. J., $2.12; R. G. Packard Co., 130 Pearl St., New York City, $2.

FANS.—Washington, D. C.—Elliott Woods, Supt. of the U. S. Capitol Buildings and Grounds, Washington, has awarded to the B. F. STURTEVANT CO., Washington Loan & Trust Co. Bldg., Washington, D. C., contract for furnishing ventilating motors and fans in the House of Representatives office building, at $18,824.

ANCHORAGES.—New York, N. Y.—Bids are asked until 11 a. m., Oct. 29, by Louis F. Haffen, Pres. Boro. Bronx, for constructing anchorages for the concrete retaining walls and building drain at the Morris Heights approach to the New York Central & Hudson River R. R. bridge, under authority of Chapter 423 of the laws of 1907.

FERRY-HOUSE.—New York, N. Y.—Bids are asked until noon, Oct. 31, by J. A. Bensel, Comr. of Docks, for contract No. 1099: for furnishing all the labor and materials required for preparing for and building a new ferry house for the Staten Island Ferry, at the Manhattan Terminal at the foot of Whitehall St., Boro. of Manhattan.

*DREDGING.—Cerro Gordo, Ill.—Bids were received on Sept. 27 by the Drainage Commissioners of Union Drainage Dist. No. 3, towns of Cerro Gordo and Willow Branch, for the construction of eleven miles of open ditch, involving the moving of 210,410 cu. yds. of earth. W. J. Day, Engr., Bement, Ill. J. C. Locher, Clk. Contract was awarded to MORGAN & CO., Bellefontaine, Ohio, at $16,664.

QUAY WALL.—Bremerton, Wash.—The Bureau of Yards and Docks, Navy Dept., Washington, D. C., received bids Aug. 24 for the construction of a quay wall at the Navy Yard, Puget Sound, Bremerton, Wash., as follows: T. Ryan, 28 Sullivan Bldg., Seattle, Wash., $26,560; International Contracting Co., 737 New York Block, Seattle, $41,290. Contract has been awarded to T. RYAN. Noted on Aug. 29.

DRYDOCK.—Cleveland, Ohio.—While the American Shipbuilding Co. may build a 700-foot drydock in the Globe yards, nothing has been decided yet and work probably will not be started until next year. Estimated cost, $500,000. Eight months will be required for its construction. Besides the dock traveling cranes to carry steel plates weighing as much as 18 tons will be installed along with other machinery aggregating $300,000 in cost. O. N. Steele is Mgr. of the local yards.

LEVEE.—New Orleans, La.—The Orleans Levee Board has awarded to A. RUPPEL two additional contracts for levee work in the Third District, one from Louisa to Desire Sts., and the other from Mazant to Poland Sts. Total cost is estimated at $115,000. His bid for earth taken near levee was 41½ cts. per cu. yd., and with earth taken from away 94½ cts. on both contracts, and $70 per M ft. for creosoted piling for levee and revetment.

TUNNEL.—Denver, Colo.—At a meeting of the Continental Tunnel Co., at the offices of Bartels & Blood, Continental Bldg., Denver, on Oct. 3, it was decided to issue $3,000,000 of bonds to be used to construct tunnel through James Peak. Engineers are reported to be making a survey and topographical map of James Peak. When completed and used by the Denver, Northwestern & Pacific Ry. Co., the time will be cut between Denver and Salt Lake City by twelve hours. Col. D. C. Dodge is Chn. Executive Com.

*EXCAVATION, ETC.—Riverton, Ala.—Two bids were received on Oct. 12 by Maj. Wm. W. Harts, Corps. Engrs., U. S. A., Chattanooga, Tenn., for excavation, riprap and paving at Colbert Shoals Canal, near Riverton. The same bid was submitted by W. A. Shippey, Memphis, Tenn., and the North Alabama Construction Co.: 350,000 cu. yds. excavation, 26.24 cts a cu yd.; 2,000 cu. yds. rip-rap, medium, $1.10; 2,800 cu. yds. rip-rap, large, $6.50; 3,000 sq. yds. paving, $4.50.

DREDGING.—San Francisco, Cal.—Bids were received as follows by Lieut.-Col. John Biddle, Corps Engrs., U. S. A., on Sept. 28 for dredging in Petaluma Creek, Cal.: (A) Edward F. Hass, Merchants' Exchange Bldg.; (B) North American Dredging Co., Merchants' Exchange Bldg.; (C) Bay & River Dredging Co., 604 Mission St., all of San Francisco: Section 1, 117,000 cu. yds. dredging—(A) 14 1-3 cts.; (B) 16.9 cts.; (C) 8.4 cts. Section 2, 29,000 cu. yds. dredging—(B) 20 cts.; (C) 14.8 cts.

WHARVES, ETC.—Ottawa, Ont.—The following contracts have recently been awarded by the Department of Public Works: a ferry wharf at Shediac, N. B., at $10,000, to J. & A. McLLIGAN, of Jacquet River; breakwater at Trancook Island, Lunenburg, N. S., to W. Y. GIRROIR & SWEET, of Antigonish, N. S., at $20,000; wharf at Agnes, Bonaventure County, Que., to A. L. LAPOINTE, of Quebec, at $4,000; and wharf at Sandpoint, Renfrew County, to J. J. FALLON, of Cornwall, Ont., at $6,000.

CREEK IMPROVEMENT, ETC.—Kansas City, Mo.—The Park Board on Sept. 30 approved plans of Geo. E. Kessler, Landscape Architect, 404 Fidelity Trust Bldg., Kansas City, Mo., for the improvement of Brush Creek and Mill Creek Valleys. The plans provide for straightening Brush Creek, to enable it to control stream for drainage purposes. From each side of creek from Worcester to Prospect Ave., roadways are to be built. The land to be condemned will not be more than 300 ft. wide at any place along the parkway.

PIERS.—Brooklyn, N. Y.—The Board of Estimate and Apportionment has passed a resolution authorizing the issue of corporate stock in the sum of $10,000,000 to pay for the acquirement and development of property along the South Brooklyn water front, from 28th St. to 36th St., and from 58th to 61st St. It is estimated that $6,000,000 of this amount will be required to pay for the purchase of the property at $1.10 per sq. ft. The remainder is to be used in building the chain of docks which J. A. Bensel, Comr. Docks, has planned along the entire water front.

WALL, FENCE.—New York, N. Y.—The following are the bids opened on Oct. 3 by the Park Board for furnishing material and constructing a stone wall surmounted by an iron fence in the Botanical Garden, Bronx Park: Joseph di Benedetto, $24,463; Matteo Capobianco, $21,800; Cooper & Evans Co., $18,400; Thos. Crimmins Contr. Co., $26,500; W. H. Danby, $20,000; Guidone & Galardi Co., $17,000; Hahn & O'Reilly, $23,900; Wm. Horne Co., $18,600; Kelly & Kelley, Inc., $18,297; J. M. Knopp, $22,578; John B. Malatesta, $17,999; McHarg-Barton Co., $17,350; Louis Pepe & Co., $30,995; Thompson & Kelsey, $17,773, and Florindo Tolosi, $25,600.

*JETTY WORK.—Galveston, Tex.—Bids were received on Aug. 16 by Capt. John C. Oakes, Corps Engrs., U. S. A., for jetty work at mouth of Brazos River. Three bids were received, of which the lowest was that of CHARLES CLARKE & CO., of Galveston, at $3.58 per ton, who have been awarded the contract. The other two were: D. M. Picton, of Galeston, $3.75 per ton, and S. H. Hudgins, of Velasco, Tex., $3.85 per ton. The estimated cost of the work is $338,000, and of this amount $125,000 is now available. It is probable that an additional $50,000 originally intended to be used for maintenance of the new dredge will be diverted to the jetty work during the second year, making in all $388,000 that is to be expended during the next two years. Noted on Aug. 29.

*DREDGING.—Detroit, Mich.—Bids were received as follows on Oct. 8 for dredging Section 1, Plan B, Detroit River. Col. Chas. E. L. B. Davis, Corps Engrs., U. S. A.: (A) 247,000 cu. yds., full rate; (B) 186,000 cu. yds., half rate; (C) total: Great Lakes Dredge & Dock Co., Chicago, Ill., (A) $1.98; (B) 99 cts.; (C) $673,200. Hickler Bros., Sault Ste. Marie, Mich., (A) $2.20; (B) $1.10; (C) $748,000. Grant Smith & Co. & Locker, Thorice, Mich., (A) $2.40; (B) $1.20; (C) $816,000. M. Sullivan, Buffalo, N. Y., (A) $2.70; (B) $1.35; (C) $918,000. The Lake Erie Dredging Co., Buffalo, N. Y., (A) $3.30; (B) $1.65; (C) $1,122,000.

Levee Work: Approximate quantities.—Section 1, muck ditch, 12,000 cu. yds.; Levee embankment, 119,100 cu. yds. Section 2, muck ditch, 11,500 cu. yds.; levee embankment, 134,000 cu. yds. Section 3, muck ditch, 9,600 cu. yds.; levee embankment, 148,800 cu. yds. Section 4, muck ditch, 8,500 cu. yds.; levee embankment, 110,700 cu. yds. Section 5, muck ditch, 8,400 cu. yds.; levee embankment, 212,100 cu. yds.

Ditches: Section 6, main ditch, Glancy Lake to Pumping Station and Swede Lake Ditch, 138,300 cu. yds. Section 7, Eliza Creek Ditch, 165,000 cu. yds. The Harman Engineering Co., Engrs., Peoria, Ill.

DREDGING.—Washington, D. C.—Bids were received as follows, Oct. 10, at the office of Major Spencer Cosby, Corps Engrs., U. S. A., Washington, for dredging earth and rock and constructing jetties in James River, Va., under the following items: (a) for earth excavation, 133,400 cu. yds.; (b) hard rock excavation, 5,750 cu. yds.; (c) for hydraulic excavation, including deposit in place, 54,000 cu. yds.; (d) for conveying excavated material from scows to point of deposit, 31,000 cu. yds.; (e) transporting excavated material on deck scows below Jetty 134, 22,000 cu. yds.; (f) for dumping excavated material in vicinity of Jordan's Point, 35,000 cu. yds.; (g) for round pine piles in place, 25,200 lin. ft.; (h) round oak piles, in place, 4,300 lin. ft.; (i) oak wales in place, 75,700 ft. B. M.; (j) oak string pieces in place, 14,200 ft.; (k) merchantable pine sheet piling in place, 377,700 ft.; (l) spikes, bolts and washers in place, 32,000 lbs.; (m) removing 175 wharf piles, each:

Coastwise Dredging Co., Norfolk, Va., (a) 39 cts. per cu. yd.; (b) $12.95; (c) 72 cts.; (d) 26 cts.; (e) 12 cts.; (f) 18 cts.; (g) 35 cts. per lin. ft.; (h) 50 cts.; (i) $50 per M ft.; (j) $50; (k) $39; (l) 4 cts. per lb.; (m) $4 per pile.

T. Sanford Ross, Jersey City, N. J., (a) 37.1 cts.; (b) $11.10; (c) 60 cts.; (d) 27 cts.; (e) 15 cts.; (f) 22.5 cts.; (g) 35 cts.; (h) 49 cts.; (i) $49; (k) $38; (l) 5 cts.; (m) $3.

Norfolk Dredging Co., Norfolk, Va., (a) 35 cts.; (b) $12.40; (c) 65 cts.; (d) 23 cts.; (e) 17 cts.; (f) 31 cts.; (g) 38 cts.; (h) 49 cts.; (i) $51; (j) $51; (k) $40; (l) 4 cts.; (m) $2.

*EXCAVATION.—Detroit, Mich.—Bids were received as follows on Oct. 7 by Col. Chas. E. L. B. Davis, Corps Engrs., U. S. A., for rock and earth excavation, Section 2, Plan B, Detroit River; by combined sub-aqueous and cofferdam method: Sub-aqueous method—(A) 76,000 cu. yds. rock, full rate; (B) 56,000 cu. yds. rock, half rate; (C) 280,000 cu. yds. earth, full rate; (D) 12,000 cu. yds. earth, half rate. Cofferdam method—(E) 704,000 cu. yds. rock, full rate; (F) 44,000 cu. yds. rock, half rate; (G) 180,000 cu. yds. earth, full rate; (H) cofferdam construction; (I) cofferdam removal; (J) pier removal; (K) total:

Grant Smith & Co. & Locker, Thorice, Mich., (A) $3.40; (B) $1.70; (C) 60 cts.; (D) 30 cts.; (E) $1.24; (F) 62 cts.; (G) 60 cts.; (H) $25,000; (I) $15,000; (J) $5,000; (K) $1,578,440.

R. E. Oliver & Bro., Knoxville, Tenn., (A) $3.50; (B) $1.75; (C) $1; (D) 50 cts.; (E) $1.24¾; (F) 62¾ cts.; (G) 50 cts.; (H) $25,000; (I) $15,000; (J) $5,000; (K) $1,690,685.

Great Lakes Dredge & Dock Co., Chicago, Ill., (A) $3.90; (B) $1.95; (C) 60 cts.; (D) 30 cts.; (E) $1.50; (F) 75 cts.; (G) 60 cts.; (H) $25,000; (I) $15,000; (J) $5,000; (K) $1,819,200.

By sub-aqueous method only—(L) 736,000 cu. yds. rock, full rate; (M) 144,000 cu. yds. rock, half rate; (N) 460,000 cu. yds. earth, full rate; (O) 12,000 cu. yds. earth, half rate; (P) pier removal: Grant Smith & Co. & Locker, Thorice, Mich., (L) $2.60; (M) $1.30; (N) 60 cts.; (O) 30 cts.; (P) $5,000. S. O. Dixon, Milwaukee, Wis., (L) $3.20; (M) $1.60; (N) 47 cts.; (O) 23½ cts.; (P) $5,000. Great Lakes Dredge & Dock Co., Chicago, Ill., (L) $3.20; (M) $1.65; (N) 60 cts.; (O) 30 cts.; (P) $5,000.

## U. S. POSSESSIONS AND CUBA.

*(* denotes that this work is advertised in Engineering News.)*

TUGBOAT.—Panama.—The Isthmian Canal Commission, Washington, D. C., has awarded to GEORGE ARCHER, 16 Beaver St., New York, contract for furnishing a second-hand tugboat, the "Catherine Moran," at $58,000, delivered at New York.

WATER SYSTEM.—Fort Wm. H. Seward (Haines post-office) Alaska.—Government has appropriated $60,000 for the installation of a water system at Fort W. H. Seward. Water will be brought across the tide lands from the west side of the Chilkat, a distance of ten miles. Sufficient power to generate electrical power will probably be obtained.

STEEL BARGES.—Panama.—The General Purchasing Officer, Isthmian Canal Comn., Washington, D. C., has awarded to the NEWPORT NEWS SHIPBUILDING & DRY DOCK CO., Newport News, Va., contract for furnishing six steel dump barges, delivered at Colon, at $120,000, delivery to commence in 200 days and be completed in 230 days.

EXPLOSIVES.—Panama.—Bids were received Oct. 14 as follows, by the Isthmian Canal Commission, Washington, D. C., for furnishing 1,200,000 lbs. saltpeter dynamite, 45% nitroglycerine, and 550,000 lbs. 60% nitroglycerine: E. I. DuPont de Nemours Co., 90 West St., New York, $195,775. The contract will probably be awarded to them.

FIRE ALARM APPARATUS.—Panama.—Bids were received as follows, Oct. 14, at the Isthmian Canal Commission, Washington, D. C., for furnishing three automatic fire alarm telegraph systems: Gamewell Fire Alarm Telegraph Co., 19 Barclay St., New York, $11,635.50; 75 days. Star Electric Co., Binghamton, N. Y., $10,167; 120 days.

RAILWAY SUPPLIES.—Panama.—The Isthmian Canal Commission, Washington, D. C., has made the following awards for railway supplies: R. C. HOFFMAN & CO., Baltimore, 4,825 tons steel rails, 70-lb., $149,575, 75 days; 29,500 steel splice bars, $10,631, 75 days; 560,000 lbs. track spikes, $12,432. MOTLEY, GREEN & CO., 66 Broad St., New York, 128,000 lbs. track bolts, $3,520, 75 days.

ENGINEERING SUPPLIES.—Panama.—Bids are asked until 10.30 a. m., Nov. 8, at the office of Col. H. F. Hodges, Gen. Purchasing Officer, Isthmian Canal Commission, Washington, for a quantity of engineering supplies, as follows: 6,000 bbls. Portland cement; four boiler feed pumps; six rowboats, six whaleboats, hoisting rope, cone head rivets, pattern letters and figures, engineering and drafting instruments, office supplies and stationery.

LUMBER.—Panama.—Bids were received as follows, Oct. 14, at the Office of the Isthmian Canal Commission, Washington, D. C., for lumber, as follows: (a) 820 creosoted piles; (b) 6,350 untreated piles; (c) 300 bridge ties, 40 guard rails, 1,340 bridge ties, 180 guard rails; (d) 1,100 caps and 6,000 stringers: G. Elias & Bro., Buffalo, (d) $37,353; 120 days. D. L. Gillespie, 541 Wood St., Pittsburg, (a) 55 cts. per lin. ft; (b) 20 cts.; (c) $75,600.67; (d) $30,947.40. Wm. D. Gill & Sons, 701 President St., Baltimore, (b) $82,713; (d) $32,450. Gulfport Creosoting Co., Gulfport, Miss., (a) $15,471; (c) $6,170. S. E. Naylor & Co., Gulfport, Miss., (b) $46,433. Pacific Creosoting Co., Seattle, Wash., $75,355. J. A. Rennolds & Bros., (b) $53,825. Salmen Brick & Lumber Co., New Orleans; (b) $50,408; (d) $38,445, $34,694. Robt. R. Sizer & Co., Jacksonville, Fla., (b) $48,442; (d) $37,978; Southern Creosoting Co., New Orleans, (a) $16,545; (c) $6,355; Southern Saw Mills Co., Ltd., New Orleans, (d) $36,103; A. S. Bacon & Son, Savannah, Ga., (b) $56,516; (d) $37,511; Arthur Gamwell, Seattle, (b) $69,658; (d) $33,602.

HOISTING ENGINES.—Panama.—Bids were received as follows, Oct. 14, by the Isthmian Canal Commission, Washington, D. C., for furnishing four hoisting engines, 7 ins. diameter cylinder, and six same, 14-in. diameter cylinder: American Hoisting & Derrick Co., St. Paul, Minn., $17,064; $13,656; 42 days. G. & W. Mfg. Co., 22 Cortlandt St., New York, small, $3,962, 90 days. Interstate Engineering Co., Chicago, large, $8,985; 70 days. Lambert Hoisting Engine Co., Newark, N. J., $14,733, ship 21 days; $13,875, ship 28 days; $14,304, ship 16 days. Lenher Engineering Co., 39 Cortlandt St., New York, $11,730; 70 days. Lidgerwood Mfg. Co., 96 Liberty St., New York, $14,220; $12,360; 30 days. Henry McCoy Co., 65 Dey St., New York, $13,776; 75 days. Mead, Morrison Mfg. Co., Boston, $12,600; $12,400; 63 days. Motley, Green & Co., 66 Broad St., New York, $13,750; 70 days. National Iron Co., Duluth, Minn., small, $3,800; 42 ship. Pittsburg Industrial Iron Works, Pittsburg, $13,600; $13,000; 45 and 60 days. Queen City Supply Co., Cincinnati, $11,400; 60 ship. Reliance Machine & Tool Works, $13,562; 150 days. Vermilye & Power, 17 Battery Pl., New York, $13,080; 70 days. Williamson Bros. Co., Cumberland St. and Aramingo Ave., Philadelphia, $10,500. Excelsior Equipment Co., Pittsburg, $13,546; 90 days.

## ENGINEERING MATERIAL PRICES.

TRACK FASTENINGS—

**Pittsburg, f. o. b. cars—Angle bars, 1.65 to 1.75 cts.; spikes, 2.25 to 2.45 cts.; bolts, square nuts, 2.65 to 2.75 cts.; bolts, hexagonal nuts, 2.80 to 2.90 cts.**

RAILS, STEEL—

**New York—at mill—New standard sections, $28; standard, second quality, $27; light sections 12 to 25 lbs., $31 to $33; old iron rails, f. o. b. New York, $22 to $22.50; old steel rails, long lengths, $14 to $15; old steel rails, re-rolling lengths, $16.50 to $17.**

**Pittsburg—Standard sections, at mill, $28; standard, second quality, $27.50 to $28; light rails, 20 to 45 lbs., $32; 16-lb., $33; 12-lb., $34 at mill.**

STRUCTURAL MATERIALS—

**New York—at tidewater—Beams and channels, up to 15-in., 1.86 cts.; over 15-in., 1.86 cts.; angles 3 × 2 and up to 6 × 6, 1.86 cts.; zees, 3-in. and larger, 1.90 cts.; tees, 3-in. and larger, 1.90 cts.; steel bars, half extras, 1.76 cts.**

PLATES AND SHEETS—

New York—at tidewater—The following prices are based on carload lots, with 5 cts. extra for less than carload lots. Terms, net cash in 30 days:

| | |
|---|---|
| Tank plates, 6¼ to 14 ins. wide | $1.86 to $1.96 |
| 14½ to 100 ins. wide | 1.96 to 2.00 |
| Flange and boiler test | 1.96 to 2.06 |
| Marine | 2.26 to 2.36 |
| Locomotive, firebox | 2.75 to 3.50 |
| Still bottoms | 2.14 to 2.29½ |

Note—Plates more than 100 ins. in width, 5 cts. extra per 100 lbs.; plates 3-16-in. in thickness, $2 extra; Nos. 7 and 8 gage, $3 extra; No. 9, $5 extra.

**Pittsburg—Tank, ¼-in. thick and heavier, 1.70 to 1.80 cts.; black sheets, 27-gage, 2.50 to 2.55 cts.; black sheets, 28-gage, 2.60 to 2.65 cts.**

IRON—

**Pig Iron:**

**At New York—tidewater—**

Northern—

| | |
|---|---|
| No. 1 X foundry | $22.50 to $23.00 |
| No. 2 X foundry | 22.00 to 22.50 |
| No. 2 plain | 21.50 to 22.00 |
| Gray forge | 21.00 to 21.50 |
| Basic | 20.00 to 21.00 |

Virginia—

| | |
|---|---|
| No. 1 foundry | 24.25 to 24.75 |
| No. 2 foundry | 24.00 to 24.25 |
| Basic | 21.00 to 22.00 |

Southern—

| | |
|---|---|
| No. 1 foundry | 24.25 to 24.75 |
| No. 2 foundry | 23.75 to 24.25 |
| No. 3 foundry | 23.25 to 23.75 |
| No. 4 foundry | 22.75 to 23.25 |
| No. 1 soft | 22.25 to 22.75 |
| No. 2 soft | 21.75 to 22.25 |
| Gray forge | 21.25 to 21.75 |
| Mottled | 21.75 to 22.25 |

**At Pittsburg, f. o. b. cars—**

| | |
|---|---|
| No. 2 foundry | $22.50 to $23.00 |
| Gray forge | 21.50 to 22.00 |
| Bessemer iron | 22.00 to 22.50 |
| Ferromangenese | 56.00 to 60.00 |
| Muck bars | 37.50 to 38.00 |
| Iron bars | 11.75 |
| Cut nails | 3.85 |

At Chicago—

| | |
|---|---|
| Lake Superior Charcoal | $27.50 to $28.00 |
| Northern Coke Foundry, No. 1 | 25.00 to 25.50 |
| Northern Coke Foundry, No. 2 | 24.50 to 25.00 |
| Northern Coke Foundry, No. 3 | 23.50 to 24.00 |
| Northern Scotch, No. 1 | 25.50 to 26.00 |
| Ohio Strong Softeners, No. 1 | 25.50 to 26.00 |
| Ohio Strong Softeners, No. 2 | 25.00 to 25.50 |
| Southern Coke, No. 1 | 24.35 to 24.85 |
| Southern Coke, No. 2 | 23.85 to 24.35 |
| Southern Coke, No. 3 | 23.35 to 23.85 |
| Southern Coke, No. 4 | 22.85 to 23.35 |
| Southern Coke, No. 1 Soft | 24.85 to 25.35 |
| Southern Coke, No. 2 Soft | 24.35 to 24.85 |
| Southern Gray Forge | 20.85 to 21.35 |
| Southern Mottled | 20.85 to 21.35 |
| Malleable Bessemer | 24.40 to 24.90 |
| Standard Bessemer | 24.90 to 25.40 |
| Jackson Co. and Kentucky Silvery, 6% | 31.40 to 31.90 |
| Jackson Co. and Kentucky Silvery, 8% | 32.40 to 32.90 |
| Jackson Co. and Kentucky Silvery, 10% | 33.40 to 33.90 |

Cast-Iron Pipe:

**New York—Carload lots, net tons, 6-in., at tidewater, $34.50 to $35.**

**Chicago—4-in. water pipe, $37 to $38; 6-in. to 12-in., $36 to $37; over 12-in., $35 to $36, with $1 extra for gas pipe.**

MISCELLANEOUS MATERIALS—

**Asphaltum:**

**Ventura and other California asphalts, $20 to $23 per ton at New York; Trinidad refined, $22 to $25 per ton; Venezuela asphalt, $25 to $60 per ton; Bermuda asphalt, $25 to $35.**

**Cement:**

**Rosendale or Natural, in wood, 95 cts. per bbl.; Portland domestic, in sacks, $1.20 to $1.30; in wood, $1.50 to $1.60; German Portland, $1.90 to $2.10.**

**Copper:**

**Lake, 18 to 18.50 cts.; electrolytic, 17.50 to 18 cts.; casting, 17 to 17.50 cts.**

**Lead:**

**New York, spot, 5.05 to 5.15 cts.**

**Spelter:**

**New York, spot, 5.45 to 5.55 cts.**

**Tin:**

**New York, spot, 36 to 36.25 cts.**

**Tar:**

**New York, $5.85 to $6 per bbl.**

**Pitch:**

**New York, $3.20 per bbl.**

LUMBER—

**New York, wholesale prices:**

**Piling—Spruce, ordinary cargoes, 6 to 7 cts.; oak, 14-in. butt, 40 to 50 ft., 19 cts.; 50 to 55 ft., 22 cts.; 55 to 60 ft., 23 cts.; 60 ft. and up, 25 cts.; pine, 60 to 65 ft., $8.50; 65 to 70 ft., $9.50; 70 to 75 ft., $10.50; 80 ft. and up, $16.**

**Railroad ties—Yellow pine, 6 × 9 ins. × 8 ft., 67 to 69 cts.; 6 × 8 ins. × 8 ft., 62 to 64 cts.; 7 × 9 ins. × 8 ft., 75 to 77 cts.; 7 × 8 ins. × 8½ ft., 74 to 75 cts., 7 × 9 ins. × 8½ ft., 79 to 80 cts.**

## INDUSTRIAL NOTES.

EXHIBITORS AT THE CONVENTION OF THE AMERICAN SOCIETY OF MUNICIPAL IMPROVEMENTS; DETROIT, MICH.; OCT. 1 TO 3.

AMERICAN ASPHALTUM & RUBBER CO., Woman's Temple, Chicago.—The "Pioneer" asphalt filler for brick and block pavements. Also asphalt waterproofing, cement, insulation, paint, etc.

A. L. BARBER ASPHALT CO., 90 West St., New York, N. Y.—Bermudez asphalt for paving.

REINFORCED CONCRETE PIPE CO., Jackson, Mich.—Pipe for sewer and culvert work.

WARREN BROTHERS CO., 93 Federal St., Boston, Mass.—Bitulithic paving material, flooring, etc.

THE CUTLER-HAMMER MFG. CO., Milwaukee, Wis., announces that the Wirt apparatus, controlled by the purchase of the Wirt Electric Co. (Philadelphia) some months ago, will be manufactured at the company's eastern works at Park Ave. and 130th St., New York.

EXHIBITORS AT THE RAILWAY SIGNAL ASSOCIATION CONVENTION.

The following is a list of exhibitors at the annual convention of the Railway Signal Association, held at Milwaukee, Oct. 8 to 10. In most cases the title is sufficiently indicative of the class of exhibits:

ADAMS & WESTLAKE CO., Chicago.—Lamps.

AMERICAN INSTRUMENT CO. Philadelphia.—Electric switchboard instruments.

AMERICAN RAILWAY SIGNAL CO., Cleveland, Ohio.

AMERICAN VULCANIZED FIBER CO., Wilmington, Del.—Insulation for rail joints and steel ties.

BATTERY SUPPLIES CO., Newark, N. J.

BOSSERT MFG. CO., Utica, N. Y.—Insulated rail joint and switch and signal fittings.

BRYANT ZINC CO., Chicago.—Battery supplies and road crossing signals.

CONTINENTAL SIGNAL CO., Chicago.

CORNING GLASS WORKS, Corning, N. Y.—Lenses.

DRESSEL RAILWAY LAMP WORKS, New York, N. Y.

DUPLEX METALS CO., New York, N. Y.—Copper-clad wire, etc.

EDISON MFG. CO., New York, N. Y.—Batteries and crossing signals.

ELECTRIC STORAGE BATTERY CO., Philadelphia.

FAIRBANKS, MORSE & CO., Chicago.—Motor velocipedes for repair men, gasoline-electric plant for charging batteries.

FEDERAL RAILWAY SIGNAL CO., New York, N. Y.

GALENA SIGNAL OIL CO., Franklin, Pa.

GENERAL ELECTRIC CO., Schenectady, N. Y.—Signal system.

GENERAL RAILWAY SIGNAL CO., Rochester, N. Y.

GENERAL STORAGE BATTERY CO., New York, N. Y.

GORDON BATTERY CO., New York, N. Y.

GOULD STORAGE BATTERY CO., New York, N. Y.

HALL SIGNAL CO., New York, N. Y.

HANDLAN-BUCK MFG. CO., St. Louis, Mo.—Lamps.

HAYES TRACK APPLIANCE CO., Geneva, N. Y.—Derails.

McCLINTOCK MFG. CO., St. Paul, Minn.—Electrical apparatus.

NATIONAL SNOW MELTING CO., Woodsville, N. H.—Apparatus for clearing switches and signal connections.

NORTHWESTERN MFG. CO., Milwaukee, Wis.—Electric motors.

QUINCY, MANCHESTER, SARGENT CO., Chicago.—Insulated rail joints.

RAIL JOINT CO., New York, N. Y.—Insulated joints.

RAILWAY SPECIALTY & SUPPLY CO., Chicago.—Electric apparatus and track material.

RAILROAD SUPPLY CO., Chicago.—Crossing signs and bells.

A. E. STEVENSON, Buffalo, N. Y.—Switch and signal device.

UNION SWITCH & SIGNAL CO., Swissvale, Pa.

WATERBURY BATTERY CO., Waterbury, Conn.

WESTINGHOUSE MACHINE CO., Pittsburg, Pa.—Batteries.

C. H. WHALL & CO., Boston, Mass.—Fiber insulation.

## TRADE PUBLICATIONS.

GARBAGE FURNACES.—The Dixon Garbage Crematory, Lexington, Ky. Paper; 5½ × 8½ ins.; illustrated.

A series of leaflets relating to different garbage furnaces built by this company have here been enclosed in a mailing envelope, which at the same time serves as a cover.

PRESERVATIVE FOR TIMBER.—C. A. Manufacturing Co., Austin, Tex. Paper; 8½ × 5½ ins.; pp. 20; illustrated.

This preservative is of German manufacture and is applied with a brush or the timber can be immersed in it. It is used for poles, piles, and timber work of all kinds, and the pamphlet consists mainly of a number of testimonials as to its efficiency for various purposes.

LATHES.—Niles-Bement-Pond Co., 111 Broadway, New York, N. Y. Paper; 9 × 6 ins.; pp. 43; illustrated.

This pamphlet is devoted to an illustrated description of the Pond rigid turret lathe for such work as gear blanks, flywheels, and gas engine cylinders, projectiles, etc. The production is said to be very much higher than by ordinary engine lathe methods. Examples of the work are illustrated.

DERAILS.—Hayes Track Appliance Co., Geneva, N. Y. Paper; two four-page circulars; 8 × 10½ ins.; illustrated.

One of these circulars shows a portable form of the Hayes derail for temporary use; it is not spiked to the ties, but locked to the rail and secured by a padlock. The other circular contains views of recent installations, in which the derail is operated from the switchstand or the interlocking tower.

PROPERTY APPRAISAL.—The American Appraisal Co., Milwaukee. Paper; 4½ × 9 ins.; pp. 145.

The business of this corporation is to make disinterested appraisals of property, plants, etc., for use in settlement of fire losses between owners and insurance companies. Of the 145 pages, 135 are devoted to two lists of clients—one list by states, one by classification of business. By far the greater number of clients are manufacturers.

WATER-TUBE BOILERS. — The Oswego Boiler & Engine Co., Oswego, N. Y. Bulletin No. 12; paper; 9 x 6 ins.; pp. 24; illustrated.

The Oswego-McNaull water-tube boiler is the subject of the entire bulletin. It is an inclined-tube boiler, with the usual drum and water legs. The tubes are all 4 ins. in diameter, arranged to facilitate cleaning. The boiler is built in standard units of 50 to 500 HP., inclusive. Nearly 200,000 HP. of them are said to be in operation.

RIGID TURRET LATHE.—The Niles-Bement-Pond Co., 111 Broadway, New York City. Paper; 9 × 6 ins.; pp. 44; illustrated.

The Pond rigid turret lathe is designed for producing work ordinarily done on engine lathes, and is especially adapted to such work as gear blanks, fly-wheels and gas-engine cylinders—increasing the production, it is claimed, 50% to 150% over that with ordinary engine-lathe methods. Two sizes, 21-in. and 28-in., are regularly built.

"APPLICATIONS OF THERMIT IN FOUNDRY PRACTICE."—The Goldschmidt Thermit Co., 90 West St., New York City. Paper; 6 × 9 ins.; pp. 12; illustrated.

The title of this pamphlet conveys a clear idea of its contents. The applications are many, among them being the prevention of piping in the casting of steel ingots—of interest in view of the fact that recent tests on defective steel rails have shown that rail flaws are often traceable to deep pipes in the ingot.

REINFORCED CONCRETE CONSTRUCTION.—G. D. Rankin, 84 La Sallet St., Chicago. Paper; 8 × 6 ins.; pp. 22; illustrated.

In the Hallberg system described in this pamphlet the reinforcement consists of plain rectangular bars, anchored at the ends. Very little is said as to the details of construction, but there are illustrations of several buildings in which this system has been used. A number of testimonials are also given. One feature is an adjustable centering that can be used several times.

TURBINE PUMPS.—The Watson-Stillman Co., 25 Dey St., New York City. Sectional catalog No. 72; paper; 6 × 9 ins., pp. 48; illustrated.

This catalog, describing single-stage and two-stage "Twinvolute" turbine pumps, is made up of sheets selected from the general matter of the company. These pumps are suited to either horizontal or vertical positions, and may be driven by gears or belt, or by direct connection to steam or gas engine, turbine, or electric motor. Supplementing the descriptive matter are 13 pages of hydraulic and corollary data.

"PORTABLE INDUSTRIAL RAILWAYS."—The Arthur Koppel Co., Pittsburg. Catalog No. 227; paper; 6 × 9 ins.; pp. 24; illustrated.

Prefaced by some convincing figures, reported by Dodge & Day, of Philadelphia, on the relative economy of the portable track and car method of grading, and the wheel-scraper method—figures decidedly in favor of the Koppel method—this catalog goes on to explain, with the aid of practical illustrations, the numerous possible applications of this well-known system. Dimension drawings and tables of the various rails and cars are given.

ELEVATING, CONVEYING AND POWER TRANSMISSION MACHINERY. — The Chain Belt Co., Milwaukee. General catalogue No. 35; cloth; 6¼ × 9¼ ins.; pp. 287; illustrated.

This substantial catalogue is opened with 22 pages of photographs of actual installations, showing the numerous applications possible for this sort of apparatus. Pages 52 to 179 inclusive are devoted to illustrations, descriptions and prices of various kinds and sizes of links, with HP. figures for each size. The remainder of the book covers sprockets, gears, elevator buckets and accessories, bearings, etc. Tumbling barrels and revolving screens are also shown.

HEATING OF BOILER FEED WATER.—The Harrison Safety Boiler Works, Allegheny Ave. and 17th St., Philadelphia. Paper; 6 × 9 ins.; pp. 12; illustrated.

The full title of this treatise—for such it is—is "Heating Boiler Feed Water Where the Main Engine is Run Condensing." It is shown that by using the exhaust steam of boiler feed pumps, circulating pumps and air pumps for preheating the feed water, the efficiency of these pumps becomes much higher than that of the best triple-expansion condensing engine. At the same time, steam-driven machines of this character are much less expensive in first cost and the cost of attendance, are less liable to get out of order and may be operated when the main engine is standing idle, which is not the case with direct-connected or electrically-driven auxiliaries. The illustrations and text cover the engineering phases of the subject, including methods of operating barometric and surface condensers, the effect of air in the condensers of steam turbine plants, description of a typical street railway power plant, etc.

"COALING IN A SEAWAY."—The Lidgerwood Mfg. Co., 96 Liberty St., New York City. Paper; 8½ × 11 ins.; pp. 48; illustrated.

The pamphlet published under this title is an elaborately illustrated description of the Lidgerwood-Miller marine cableway, made by the Lidgerwood Co. under the patents of Spencer Miller, M. Am. Soc. C. E. The photographs show battleships of several nations taking coal at sea under good speed, from equipped and unequipped colliers and transferring coal one to another. The cableway is operated by ordinary ships' winches, and has transferred coal under actual marine conditions at the rate of 83 tons per hr. in a very rough sea. Marine and naval engineers will find the pamphlet both valuable and instructive. The Lidgerwood-Miller system was described in Engineering News for Apr. 5, 1900, page 220.

ELEVATING, CONVEYING AND POWER TRANSMITTING MACHINERY.—Webster Mfg. Co., 1075 W. 15th St., Chicago. Cloth; 6¼ × 9¼ ins.; pp. 574; illustrated.

Grain elevating and conveying apparatus and equipment for grain elevators or warehouses occupy a good share of this comprehensive catalogue, but there is also great variety of apparatus for elevating and conveying freight, packages, barrels, ice, coal, broken stone, cement, etc. Buckets and chains for ladder dredges are also included. A number of views are given of coal and ash handling plants, grain elevators, rope-transmission plants, etc., equipped by this company. Prices are given for the various machinery and apparatus, and there are price lists of link belting, sprocket wheels, rope, shafting and hangers, bolts, scales, gears, and a general line of machine supplies.

FUEL ECONOMIZERS.—The Green Fuel Economizer Co., Matteawan, N. Y. Paper; 6 × 9 ins.; pp. 8; illustrated.

Now and then a manufacturer realizes that one of the best ways to interest possible purchasers in his products is to lay before them a good technical account of an interesting plant installed by him or making use of his products. The pamphlet before us reproduces a paper describing 16 Green fuel economizers installed in connection with 64 520-B.HP. Babcock & Wilcox boilers at the 74th St. station of the Interborough Railway, New York City. The description is in the form of a paper read by R. D. Tomlinson before the New York Railway Club. In addition to the description, the paper gives some interesting figures designed to show the saving effected by the use of the economizers, which is figured out to be $37,537 a year, or a net return of 13.5% on the original outlay.

FOREST MANAGEMENT.—F. R. Meier, Consulting Forester, 1 Broadway, New York City. Paper; 5 × 6¼ ins.; pp. 8.

Mr. Meier has opened the office noted above for consulting practice in the profession of forestry.

ROOFING TIN.—The Berger Mfg. Co., Canton, Ohio. Paper; 5 × 7 ins.; pp. 4.

The inner two pages of this somewhat unique pamphlet, describing "Star Spangled" terne plates, are a reproduction of the company's 25-year guarantee of satisfactory service. The sheets made by this company are rolled from iron reduced in an old-fashioned charcoal forge, and are hand-dipped, with no flux save palm oil. This retention of a process now almost obsolete, with the very pure quality of iron which it yields, is the basis of the aforesaid 25-year guarantee. The company also makes eavestroughs and pipes, and other sheet roof-fittings.
by electric motors.

AIR-PRESSURE WATER SUPPLIES.—Kewanee Water Supply Co., Kewanee, Ill. Paper; 8 × 10 ins.; pp. 63; illustrated.

Although the "Kewanee System," as primarily designed, is especially valuable for isolated buildings for which a pipe supply is not available, yet this catalogue shows that the system has been adopted for at least one municipal plant—at Henry, Ill., a place of 2,500 population. This municipal system consists of 28 × 36-ft. Kewanee tanks and duplicate pumps driven by gasoline engines. It is hardly necessary to explain that the unique feature of this system of water supply is the utilization of air-tight tanks, generally but not necessarily placed in a horizontal position, either in cellars or buried in the ground, and filled with water by a special pump which, in conjunction with an automatic air valve, supplies air for compression when needed. The tanks are made in almost any desired size, and the pumps are operated by almost any desired power. A number of installations are described in the pamphlet, and testimonials are given from many users.

DIGGING MACHINERY.—The Hayward Co., 97-103 Cedar St., New York City. Catalog No. 30; heavy paper; 9½ × 11¾ ins.; pp. 151; illustrated.

The mere statement that this catalogue is illustrated conveys but little idea of its completeness. Of the 151 pages, 120 are devoted to very handsome reproductions, on heavy plate paper, of installations, floating plants, etc., of the Hayward machinery. The extremely variable conditions to be met in supplying machinery of this sort make rigid, standard lines out of the question; and in this complete and handsome portfolio of views the Hayward Co. has taken the best means of showing the many conditions with which they are fitted to cope.

The first 30 pages are devoted to illustrations, supplemented by tables of sizes, weights, dimensions and prices, of a large line of excavating buckets—orange-peel, clam-shell, bottom-dump cylindrical, turnover cylindrical, and scoop. Page 31 shows a two-in-one hoisting drum, for cases where a double-chain bucket is to be operated by a single-drum engine, or where it is necessary to use a topping-lift in connection with a double-drum engine and a Hayward bucket.

WATER SOFTENING AND FILTRATION.—Wm. B. Scaife & Sons Co., Pittsburg, Pa. Paper; 8 × 10 ins.; pp. 96; illustrated.

A considerable variety of water softening plants, on both the We-Fu-Go and the Scaife systems, are here described and illustrated. Mechanical filters of both the gravity and pressure types are also described. The most novel feature of the catalogue, we take it, is its description of cylindrical and conical strainers. In the cylindrical strainers, the waterways consist of slits parallel to the diameter of the cylinders; and in the conical strainers they also consist of slits; but here the openings near the base of the cone are parallel with the base, while those near the apex are at right angles with the lower openings. The cylindrical strainers are used where large volumes of wash water or high pressures are available, "so that the washing can be accomplished quickly and with a minimum amount of wash water." The conical strainers are used with small quantities and low pressures. With both types of strainer, it will be seen, the wash water is thrown in a great variety of [illegible] sections, this variety being increased in [illegible] case of the cylindrical strainers by placi[illegible] the latter at right angles with each other [illegible] stead of in parallel lines.

**For other Proposal Advertisements see pages 55, 56, 57, 58, 60, 61, 62 of Advertisements and [illegible] News page 132.**

## PAVING.

Office of the Board of Public Works, Salt Lake City, Utah, [illegible], 1907.

Sealed proposals will be received at this office until 8 o'clock P. M., [illegible] December 6, 1907, for the work of grading, curbing and paving First South Street, from Second East Street to Thirteenth East [illegible].

The approximate quantities to be done are as follows:

| | | |
|---|---|---|
| Grading | 60,000 | cubic yards |
| Curbing | 17,000 | lineal feet |
| Asphalt pavement | 41,000 | square yards |

Instructions to bidders, together with specification and forms for contract and bond, can be obtained upon application at the office of the Board of Public Works or City Engineer.

The right is reserved to reject any and all bids.

By order of the Board of Public Works.
F. J. LEONARD,
Chairman.

LOUIS C. KELSEY,
City Engineer. 16-4t

U. S. ENGINEER OFFICE, Widener-Spoon Building, Philadelphia, Pa., Oct. 16, 1907.—Sealed proposals for dredging in Delaware River in Sections 4 and 5, will be received here until 12 noon, Nov. 15, 1907, and then publicly opened. Information furnished on application. J. C. SANFORD, Major, Engrs. 16-4t

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